

PDE+P Meeting Minutes for September 9, 2019 Approved at PDEP meeting 11/4/2019

Members Present:	
Catherine Way	CoChair, DC3 City of Larkspur Councilmember, MCCMC
Frank Cox	CoChair, DC3 Member, OES Auxiliary
Garry Lion	DC3 member, Marin Economic Forum
James Wickham	PG&E Safety + Preparedness Specialist, MV Mayor
Maggie Lang	Mill Valley Fire, Emergency Prep Coordinator
Tom Cromwell MD	Marin Medical Reserve Corps etc.
Vincent Valenzuela	DC3, San Rafael Red Cross Disaster Manager
Members Excused or Absent:	
Keith Kennedy	DC3 Member, Dist. 3 / Sausalito area
Peter Mendoza	DC3 / AFN representative
Quinn Gardner	SRFD emergency manager
Members Public Present	
Anne Carta	Marin Medical Reserve Corps, <u>ACarta@marincounty.org</u>
Chris Choo	DC3, Marin Marin Dept Public Works <u>cchoo@marincounty.org</u>
Gil Dong	SRFD Emergency Mgmt Specialist <u>gil.dong@cityofsanrafael.org</u>
Kristina Dahl, PhD	Union Concerned Scientists <u>KDahl@ucsusa.org</u>
Lori Schifrin	CERT, MMRC etc. / <u>lori.sch@att.net</u>
Marco Berger	Multicultural Center Marin, <u>mberger@multiculturalmarin.org</u>
Sarah Finnegan	Cal OES, Coastal Region <u>sarah.finnigan@caloes.ca.gov</u>
Robert Bundy	Corte Madera Planning Comm. <u>bundyworld@comcast.net</u>

Handouts distributed:

- Agenda, PDEP meeting 09/09/2019
- Draft PDEP Minutes 2019-07-01 (b).pdf Approved Motion Tom Cromwell, 2nd Garry Lion.
- Marin Co. News Release Preparedness month
 - <u>https://www.marincounty.org/main/county-press-releases/press-releases/2019/hhs-preparednessmonth-090519</u>
- Marin Co. News Release Meeting Sea Level Rise Head on
 - <u>Https://www.marincounty.org/main/county-press-releases/press-releases/2017/dpw-slr-020217</u>
- Marin IJ print: Aug 2, 2019: 10,000 Marin Homes flooded by 2100
- Drawdown Marin Roadmap (URL)
 - <u>https://www.marincounty.org/depts/cd/divisions/sustainability/climate-and-adaptation/drawdown-marin</u>
- SF Bay Faces Sea Level rise, Chronic Innundation, Union Concerned Scientists, by Christina Dahl, PhD:
 - https://blog.ucsusa.org/kristy-dahl/sea-level-rise-chronic-inundation-san-franciscobay-area
- Underwater, Rising Seas, Chronic Floods, UCS By Christina Dahl Ph.D
 - <u>https://www.ucsusa.org/sites/default/files/attach/2018/06/underwater-analysis-full-report.pdf</u>
- Resilient Shore webpage: <u>https://resilientshore.org/</u>
 - San Rafael Climate Action Plan 2030 webpage: https://www.cityofsanrafael.org/climate-change-action-plan/
- CBS news clip Sea Level Rise could Flood Bay Area Homes / New Map, 8-1-2019:
 - <u>https://sanfrancisco.cbslocal.com/2019/08/01/sea-level-rise-could-flood-bay-area-homes-according-to-new-map/</u>



- Corte Madera Adapting to Climate Change webpage:
 - <u>https://www.townofcortemadera.org/837/Climate-Adaptation-Plan</u>
 - Marin Watersheds webpage: <u>https://www.marinwatersheds.org</u>
- Resilient Neighborhoods webpage:
 - <u>https://www.resilientneighborhoods.org/</u>
- Hurricane Dorian -- blog by Dr. Dahl:
 - <u>https://blog.ucsusa.org/kristy-dahl/hurricane-dorian-what-the-presidential-candidates-and-all-of-us-need-to-know</u>
- Sea Level Rise in Bay Area is Going to be Much More Destructive Than we Think, Says UGSS Study
 - <u>https://www.kqed.org/science/1939059/the-ocean-is-not-a-bathtub-so-sea-level-rise-will-be-more-damaging</u>
- FireSafe Marin: Wildfire Prevention & Mitigation Initiative (one page)
- West Marin Disaster Council agenda 9/5/2019
- Draft PDEP Contact list 9/5/2019
- Items distributed / passed around:
 - o Underwater, Rising Seas, Chronic Floods, UCS By Christina Dahl Ph.D
 - Know your Risks Tidal Flooding, Union Concerned Scientists
 - Sound the Alarm 9-28-2019 Red Cross & multiculturalmarin.org
 - o Red Cross: Celebrate National Preparedness month flyer
 - o Red Cross: 21 Weeks to Prepare one sheet handout
 - MulticultuaralMarin.org Community Gala Oct 5th postcard
- I. Welcome, Introductions, Handouts. Review of Minutes
 - Catherine welcomed attendees, and introductions were made.

II. Marin Underwater - a Sea Change in our understanding

Dr. Kristina Dahl, Ph.D.¹ a senior climate scientist with the non-profit research organization, the Union of Concerned Scientists (UCS), has written extensively on the subject of climate change and sea rise.²

- Dr. Dahl used a PowerPoint presentation to illustrate her talk, primarily based on five successive widely published UCS studies she helped co-author:
 - 2014: Encroaching Tides: How Sea Level Rise and Tidal Flooding Threaten US East and Gulf Coast Communities over the Next 30 Years <u>https://www.ucsusa.org/sites/default/files/attach/2014/10/encroaching-tides-full-report.pdf</u>
 - 2016 July: 'The US Military on the Front Lines of Rising Seas Growing Exposure to Coastal Flooding at East and Gulf Coast Military Bases' <u>https://www.ucsusa.org/sites/default/files/attach/2016/07/us-military-on-front-lines-of-rising-seas_all-materials.pdf</u>
 - 2017 April: Rising Seas in California An update on Sea-Level Rise Science. <u>http://www.opc.ca.gov/webmaster/ftp/pdf/docs/rising-seas-in-</u> california-an-update-on-sea-level-rise-science.pdf

¹ Dr. Dahl biography: <u>https://www.ucsusa.org/bio/kristina-dahl</u>

² Union of Concerned Scientists (UCS) <u>https://www.ucsusa.org/</u>. See a partial listing of Dr. Dahl's recent articles and publications listed on her blog: <u>https://blog.ucsusa.org/author/kristy-dahl</u>



- 2017 July When Rising Seas Hit Home Hard Choices Ahead for Hundreds of US Coastal Communities (referred to as 'Hard Choices') <u>Https://www.ucsusa.org/sites/default/files/attach/2017/07/when-rising-seashit-home-full-report.pdf</u>
- 2018: Underwater: Rising Seas, Chronic Floods, and the Implications for US Coastal Real Estate (referred to infra as 'Underwater') <u>https://www.ucsusa.org/sites/default/files/attach/2018/06/underwater-analysis-full-report.pdf</u>
- Community inundation by water can have many causes: tides, storms, floods, surges, and sea rise. UCS adopted a uniform definition of chronic inundation to compare tide guage data across the nation as the area flooded at least 26 times per year, or, on average, every other week.³
- Taking that digital data, they mapped flooding using Digital Elevation Model (DEM). obtained from the National Oceanic and Atmospheric Administration (NOAA).
- Three potential sea rise projections, based on low, intermediate, and high scenarios.
- The low scenario was based solely on ocean warming. The intermediate scenario added moderate ice sheet lost. The high scenario considered greater ice sheet melting. Global warming beyond the projected 2 degrees Celsius may have catastrophic consequences.
- Additional technical variables considered such factors as US Army Corps of Engineers data, FEMA flood mapping, the Zillow Transaction and Assessment Dataset (ZTRAX) properties database, Census data, and multiple other recognized sources.⁴
- FEMA flood mapping is largely based on historical (past tense) data, whereas the UCS mapping is based on scientific trends supporting future projections. FEMA supported flood insurance and private insurance rates are based on current and projected trends.
- Assessing California real estate losses due to inundation was particularly difficult. The available shared Zillow database only reported residential county assessed valuation, which is far below current market value. Commercial property values, too, were hard to value. California's Proposition 13, the Jarvis-Gann initiative, approved by California voters on June 6, 1978, sharply under-assessed residential properties for many residents.
- Nationally, home values vary widely because of a range of additional market and political reasons. For example, a home in the SF Bay area may cost many multiples of the same home in rural Louisiana.
- In the high sea level rise scenario, within the next 15 years roughly the national study estimates about 147,000 existing homes and 7,000 commercial properties worth \$63 billion and about 280,000 people are at risk of being inundated an average of 26 times per year, or more. By 2045 (about the term of a 30-year home mortgage) sea levels are

³ "You Can't Ignore the Future: 5 Reasons Climate Science Looks Beyond 2040" (May 2019) "The United Nations Framework Convention on Climate Change, as stated in goals of the Paris Agreement, have committed to holding Earth's global average surface temperature to well below 2 degrees Celsius (or 3.6 degrees Fahrenheit)"

⁴ Technical Backgrounder: Underwater: Rising Seas, Chronic Floods, and the Implications for US Coastal Real Estate. <u>https://www.ucsusa.org/sites/default/files/attach/2018/06/underwater-analysis-technicalbackgrounder.pdf</u>



projected nationally to inundate about 311,000 homes, or more than half a million people. 5

- The UCS National study of sea rise linked inundation did not map the impact of inland flooding, such as Mississippi and adjacent river, annual inundations.
- In Marin County, by 2045, about 4,400 homes in Marin County, with an assessed valuation of about \$2.7 billion, serving about 10,000 persons are at risk of chronic flooding due to sea level rise. By the end of the century, about 10,000 Marin homes, valued at \$6.6 billion, serving about 22,000 people, are at risk of inundation.
- Within the nine Bay Area counties, roughly 13,000 homes valued at \$8.6 billion that currently house 33,000 people are at risk of chronic inundation in the next 30 years.⁶
- The cumulative impact of rising seas, tides, floods, and other hydrological variants will severely impact not only residences and businesses, but costs of relocation or mitigation, transportation and emergency access / egress corridors, supply logistics, energy, storm water and bay-water based sanitation infrastructure, local economies and tax revenue, schools, health facilities, insurance costs, housing supply, and much more.⁷
- Dr. Dahl showed a series of mapped inundation projections for Marin County based on these scenarios for years 2035, 2060, 2080, and 2100, with a special attention to the Eastern populated areas of Marin.
- For comparison sake, Dr. Dahl narrowly focused her maps showing expected inundation in Corte Madera Larkspur, San Rafael, and Santa Venetia. Other areas, such as Southern Marin, Novato, and West Marin were mentioned, but the sharp focus on these few areas of Marin showed profound risks of flooding deep into both residential and commercial areas.
- A comparison of all 9 Bay Area Counties showed sea rise linked inundation will profoundly affect our existing housing shortage, real estate values and their tax revenue, and the regional workforce economy.
- Interested persons may do 'what if' analysis over geographical / time / scenario variables using the UCS online mapping tool.⁸
- The UCS inundation maps were based on available topographic elevation reports compared to known and projected sea level & similar flooding events. The UCS reports did not attempt to adjust for local mitigation efforts, such as levees, walls, pumps, etc.,

<u>Chris Choo</u>, Marin County Department of Public Works (DPW) watershed and sea level rise planner for the Marin County Watershed Program⁹ and Marin BayWAVE, spoke primarily on the impact of sea rise and related inundations along the eastern urban Marin corridor.

• There are two main sea level rise assessment projects that are underway in the County – one along the coast Collaboration: Sea-Level Marin Adaptation Response Team (C-

⁷ Hard Choices, UCS report 2017, Cf pgs 29-34, infra.

⁸ When Rising Seas Hit Home: An Analysis by the Union of Concerned Scientists Online Mapping tool: <u>https://ucsusa.maps.arcgis.com/apps/MapSeries/index.html?appid=64b2cbd03a3d4b87</u> <u>aaddaf65f6b33332</u> See related site: <u>http://storymaps-classic.arcgis.com/en/applist/map-series/</u> and the report at: <u>https://www.ucsusa.org/global-warming/global-</u> warming-impacts/when-rising-seas-hit-home-chronic-inundation-from-sea-level-rise

⁵ Underwater at pg 5

⁶ Underwater at pg 8

⁹ Marin County DPW Watershed & Sea Rise main page: <u>http://www.marinwatersheds.org/</u>



SMART) and one along the bayside Marin Bay Waterfront Adaptation Vulnerability Evaluation (BayWAVE).¹⁰

- Using a PowerPoint presentation, Chris began with a series of historical Marin inundation photos that illustrated Marin's flooding events, including:
 - o 1973 Central Marin / Lucky Drive flooding
 - o 1978 West Marin / Stinson Beach f
 - 1982 San Rafael / Francisco Blvd.
 - o 2014 Richardson Bay / Sausalito shoreline
- Citing international studies of the Intergovernmental Panel on Climate Change (IPCC), an intergovernmental body of the United Nations, Chris illustrated a chart showing Sea Level Rise (SLR) vs Tme reported by the IPCC¹¹. Multiple time projections are possible, but the X-Y graphing consistently shows rapidly accelerating SLR into the near future.
- Marin County, in collaboration with cities and special districts, have undertaken multiple mitigation projects illustrated by additional PPTX slides showing:
 - Corte Madera creek flood gates
 - Sandbagging
 - Commercial establishment mobile Flood doors (compared to massive flood gates on the River Thames in Britain).
- Chris illustrated the concept of mobile storm surge barriers by showing an aerial photo of the Maeslantkering massive surge barrier on the Nieuwe Waterweg, in South Holland, Netherlands.¹²
- She illustrated a failure to engineer surge barriers adjacent to urbanized areas by showing an aerial photo of the New Orleans levee failure by Hurricane Katrina, a Category 3 hurricane, on August 29, 2005.
- Climate change links increasing fire risk with increasing sea level inundation risks as two sides of one coin.
- For example, a map taken from the Marin County Community Wildfire Protection Plan (CWPP) 2016¹³ shows most of the inland and elevated areas of the County are high to extreme fire risk. Compare these maps to Marin County inundation maps showing most of the bayside flatlands in the County are at high risk of SLR inundation.¹⁴ Basically, residents of Marin along the shore can expect increasing risks of floods, while Marin

¹² The Maeslantkering storm surge barrier protects the Rotterdam harbor and surrounding areas. See: <u>https://en.wikipedia.org/wiki/Maeslantkering</u>

¹³ The Marin County Community Wildfire Protection Plan (CWPP): <u>https://www.firesafemarin.org/cwpp</u>

¹⁰ DPW Marin Sea Level Rise web resources: <u>http://www.marinwatersheds.org/creeks-watersheds/sea-level-rise</u> and <u>www.MarinSLR.Org</u>. The Marin Coastal page, C-Smart, is here: <u>https://www.marincounty.org/depts/cd/divisions/planning/csmart-sea-level-rise/c-smart-project</u> The Marin Bay Waves project, BayWAVE, is here: <u>https://www.marincounty.org/main/marin-sea-level-rise/baywave</u>

¹¹ The Intergovernmental Panel on Climate Change (IPCC) See particularly the October 2018 report: 'Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C approved by governments' at <u>https://www.ipcc.ch/sr15/</u> and <u>https://www.ipcc.ch/2018/10/08/summary-for-</u> policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/

¹⁴ Marin Bay Waterfront Adaptation and Vulnerability Evaluation (BayWAVE) webpage: <u>https://www.marincounty.org/main/marin-sea-level-rise/baywave/vulnerability-assessment</u> with links to flooding maps at: <u>https://www.marincounty.org/-</u> <u>/media/files/departments/cd/planning/slr/baywave/marincoartslrmaps2017web.pdf?la=en</u>



residents uphill from them face increasing risks of wildfires. Chris is coordinating with MCFD Chief Jason Weber and others in analyzing these risks.

• The year 2017 Marin Shoreline Sea Rise Vulnerability Assessment analyzed SLR impacts on community assets, including land, buildings, transportation, utilities, working lands, natural resources, recreation, emergency services, and cultural resources across the Eastern side of the county.¹⁵ The report considered multiple mitigation strategies, such as nature based measures (habitat restoration, horizontal levees, etc.), engineered solutions (levees, walls, pumps), and regulatory efforts (easements, building codes, buyouts, etc.). The Executive Summary of that report concluded:

"Sea level in the San Francisco Bay Area has risen eight inches in the past century, and could rise up to 70 inches by the end of the century. Marin's bay shoreline is vulnerable to sea level rise and intensifying storm patterns. The third National Climate Assessment cites strong evidence that the cost of doing nothing exceeds the costs associated with adapting to sea level rise by 4 to 10 times. Therefore, it is critical the County of Marin, incorporated jurisdictions, and special districts plan and prepare for the impacts of sea level rise to ensure a resilient county for present and future generations."¹⁶

- Marin DPW and its partners have undertaken multiple ongoing mitigation efforts, to reduce the impact of SLR in Marin, some of which are listed in multiple public and NGO sites, including improved land use planning, infrastructure and capital improvement projects, 'green' restoration efforts, and more.¹⁷ Many of these reports are downloadable at the County Sea Level Rise Library.¹⁸
- Chris cautioned, using a satiric but serious slide, that the public tends suffer from what she termed the 'hydro-illogical cycle' moving ineffectively from panic to apathy to awareness to concern and back to panic when faced with rains, drought, and floods.
- She strongly supports increased public education and community engagement in responding to the certainty of sea level rise and all the related impacts of climate change.

III. Updates from PDEP members

- MCCMC Marin County Council Mayors + City Councilmembers

• Catherine reported that MCCMC had not met since our last meeting.

¹⁵ 2017 Marin Shoreline Sea Rise Vulnerability Assessment ('Assessment')
https://www.marincounty.org/main/marin-sea-level-rise/baywave/sea-level-rise-library?tabnum=2 See
full report here: <u>https://www.marincounty.org/-</u>
/media/files/departments/cd/planning/slr/baywave/vulnerability-assessment-
final/final allpages bybconsulting reduced.pdf?la=en

¹⁶ 2017 Assessment, id. at page xiv.

¹⁷ Sea Level Rise Adaptation Framework - see multiple efforts, including: the Sea-Level Marin Adaptation Response Team, Marin County Community Development Agency (May2017) at <u>https://www.marincounty.org/~/media/files/departments/cd/planning/slr/c-smart/chapters_13.pdf?la=en</u> and

https://www.sfei.org/sites/default/files/toolbox/Adaptation%20Framework%20for%20Marin%20090619% 20low%20res.pdf and https://scc.ca.gov/projects/san-francisco-bay/mcf/ and https://www.pointblue.org/science_blog/sea-level-rise-adaptation-framework/

¹⁸ Marin County Sea Level Rise Library: <u>https://www.marincounty.org/main/marin-sea-level-rise/baywave/sea-level-rise-library</u>



- <u>West Marin</u>

- The West Marin Disaster Council agenda minutes of 9/5/19 was part of the PDEP meeting packet.
- Red Cross
 - Vincent advised Marin Red Cross has scheduled a 'Sound the Alarm'¹⁹ free smoke detector installation effort on Sept 28th in the Canal Area.
 - Marco Berger, the Community Engagement and Wellness Coordinator for the Multicultural Center of Marin, passed around brightly colored 'Sound the Alarm' flyers for this event, and encouraged everyone to support the effort by volunteering.
 - Marco also passed around postcard invitations to the 2nd Annual Community Gala to be held at the JCC October 5th.
 - Vincent advised community groups such as PTAs, group homes or others may apply to participate in this fire prevention project.
 - The ARC is also supporting personal / family preparedness by distributing handouts such as the Celebrate National Preparedness month flyer and the 21 Weeks to Prepare one (per week) sheet handout
- Southern Marin / Business Community
 - Garry, Jim Wickham, Maggie Lang, and others met with the Mill Valley City Council to discuss preparing for expected PG&E Public Safety Power Shutoffs (PSPS)²⁰ that may be instituted on severe fire threat 'Red Flag Days'.²¹
 - They have recently engaged about 12 Mill Valley businesses under the Marin Business Emergency Readiness (M'BER)²² program that is being actively supported by the City of Mill Valley. In the event of a PSPS event, critical supplies and services needed by local residents could be jeopardized if no planning is undertaken.
 - Jim Wickham reported the City Council continued discussions of proposed wildfire vegetation management ordinances to Amend Title 15 of the City of Mill Valley Municipal Code.²³
 - Jim advised the Calfornia Assembly bill sponsored by Laura Friedman, AB-1516 Fire prevention: wildfire risk: defensible space and fuels reduction management.(2019-2020)²⁴ continueds to move through the Legislature, and may affect comparable proposed ordinances in Mill Valley. A Blue Ribbon Commission appointed in Mill Valley will review the proposed Mill Valley ordinance, infra.
 - Mill Valley tested five Long Range Acoustic Device (LRAD) emergency alert voice / siren devices recently, and is considering possible additions to the system.

²¹ PSPS conference: <u>http://www.cityofmillvalley.org/news/displaynews.htm?NewsID=1978&TargetID=1</u>

- ²³ Mill Valley City Council records: <u>https://cityofmillvalley.granicus.com/MetaViewer.php?view_id=2&event_id=890&meta_id=65930</u>
- ²⁴ AB 1516: <u>https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200AB1516</u>

¹⁹ Red Cross 'Sound the Alarm' <u>https://www.redcross.org/sound-the-alarm.html</u>

²⁰ PG&E Public Safety Power Shutoffs (PSPS): <u>https://www.pge.com/en_US/safety/emergency-preparedness/natural-disaster/wildfires/public-safety-power-shutoff-faq.page</u> See also the approved 6/3/19 PDEP minutes with detailed information from Jim Wickham, Mayor of Mill Valley and also PG&E Public Safety Representative.

²² M'BER program: <u>https://readymarin.org/get-ready/ready-business/</u>



- Questions of public education and potential confusion over LRAD alerts are being evaluated.
- CERT, Get Ready and Get Ready 5th:
 - Maggie is assisting with CERT for the next few weeks to permit the newly hired Marin County Disaster Preparedness Coordinator, Michael Schmidt, to begin work.
 - The updated <u>https://readymarin.org/</u> CERT calendar reflects most of the classes are already filled to capacity. The GR manuals will be updated and reprinted soon. A train the trainer (T3T) class will be held September 26th.
- Access + Functional Needs communities (AFN) and MIDC:
 - Peter Mendoza was unable to attend the meeting, so this portion of the agenda is continued to next meeting.
- Public Health Preparedness and related programs
 - PDEP greatly thanks Megan Stevenson, former Sr Program Coordinator H&HS Public Health, for her committee work. Megan has left County service for a new position, and PDEP wishes her the best.
- Public Safety / Emergency Management
 - Quinn Gardner, SR Emergency Services Manager, was unable to attend the meeting. Her report is continued to our next meeting.
 - Gil Dong, a part time SRFD Emergency Management Specialist, having retired as Berkley's Fire Chief, was welcomed as a guest.
 - Gil advised that SRFD had hosted CERT and Neighborhood Response Group meetings recently, including the August 28th event at the San Rafael Community Center. Frank was one several local neighborhood speakers at the event.
- Utilities including PG&E
 - Jim Wickham advised PG&E continues to improve the PSPS program, including creating a pre-PSPS fire weather site <u>https://www.pge.com/en_US/safety/emergency-</u>preparedness/natural-disaster/wildfires/psps-weather-map.page.
 - PG&E provided funding to support CERT radios in Mill Valley recently.
- Marin Medical Reserve Corps (MMRC), etc.
 - Anne Carta, Coordinator for the Marin Medical Reserve Corps (MMRC) was a welcome guest at PDEP, and reported the Marin Board of Supervisors would be honoring CERTs and MMRC members at the board meeting 9/10/19.
 - MMRC will host a First Aid for Disaster Response (FADR) training at Rotary Village on Saturday 9/21/19.
 - MMRC is coordinating with County H&HS to help train about 1,200 in home service workers in preparedness for persons with AFN.
- OES, Training and other Events:
 - Sarah Finnigan, Emergency Services Coordinator, OES Coastal Region / Mutual Aid Region II, was welcomed as a guest to PDEP. She reported that State OES will host a public preparedness event as part of September National Preparedness month on 9/14.
 - A mutual aid meeting on 9/11 will change it's location to Napa.
 - A pre-season flood preparedness meeting will be held 9/19 by the Dept of Water Resources.
 - Frank mentioned, and Gil Dong confirmed, that Bay Area UASI will host multiple EOC staff trainings at County OES this month and next.

IV. Open Time / Public Comment

- Maggie reported the Chronicle cited a JAMA article advising N95 respirator masks have very limited protective use in reducing the risk of wildfire smoke inhalation.
- Several suggestions were made to Frank and Catherine on what to report to DC3 at the 9/12/19 meeting.



• Frank invited PDEP members to consider the frequency of PDEP meetings at a future date.

Closure: 3:03 pm end of meeting

• The October PDEP meeting will have to be cancelled as both CoChairs are unavailable in early October.

Next Meetings:

Dates may be flexible as circumstances require.

- PDEP Meetings: PDEP Year 2019: Oct. 7 Cancelled, Nov. 4 2019, Dec. 2, 2019 PDEP Year 2020: 1/6, 2/3, 3/2, 4/6, 5/4, 6/1, 7/6, 8/3, 9/14, 10/5, 11/2/, 12/7/2020 Site: PDEP unless otherwise posted: Central Marin Police Community Rm.
- DC3 Meetings: 3-5pm: Board Chambers, Civic Center, Dates may be flexible
 DC3 Year 2019: 9/12/2019, 12/12/2019
 DC3 Year 2020: 3/12/20, 6/11/2020, 9/10/2020, 12/10/2020 (may be adjusted)

Online: https://www.marinsheriff.org/about-us/field-service-bureau/office-of-emergency-services

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