

January 18, 2017

To: John Armentrout, NWEA  
From: Scott Cameron, GeoLogical Consulting, LLC  
Subject: Continuing impact of NWEA 2015 Symposium – “Energy Infrastructure Preparedness for a Cascadia Mega-Earthquake”

Dear John:

I am writing to recognize NWEA for its October 2015 Symposium on “Energy Infrastructure Preparedness for a Cascadia Mega-Earthquake”. I attended this meeting, which was among the best organized and executed events I have attended in 35 years as a professional geoscientist. In particular, I want to acknowledge the contribution of the NWEA symposium to the subsequent November 2016 meeting on the Cascadia Subduction Zone (CSZ) and its hazards, held at the National Academy of Sciences (NAS), in Washington, DC. Materials and insights from the NWEA event were key in making the case for the later NAS event.

- Background: I am a member of the Board on Earth Sciences and Resources (BESR) of the NAS. A key role of the NAS is to provide unbiased scientific reports and forums for the benefit of decision-makers. The key customers are Congress and Departments/Agencies of the Executive Branch. In this role BESR covers the full spectrum of earth science topics, including hazards such as earthquakes and tsunamis.
- During mid 2015 the risks associated with a mega-quake along the CSZ became more visible in the public eye, with a widely read article in the “New Yorker” magazine and other stories in the media, including the “Unprepared” documentary by Oregon Public Broadcasting.
- NWEA held its symposium in Hood River in early October 2015, highlighting key hazards and preparedness issues related to the CSZ. Ray Wells of the USGS delivered the keynote, overview presentation.
- Shortly afterward, the American Geosciences Institute held a webinar on hazards associated with the CSZ, which was also informative.
- In early November 2015, concepts and materials shared at the NWEA meeting (including slides shared by Ray Wells) were incorporated into a proposal to BESR that NAS hold a 2016 workshop on the hazards posed by the CSZ. This was one of two topics ultimately selected for a workshop in 2016. The proposal presentation is attached below.
- The resulting workshop, “Cascadia Subduction Zone: Science, Impacts, and Response”, was held November 10, 2016, and co-sponsored by BESR and the

Committee on Seismicity and Geodynamics (COSG). A link to the agenda and presentations from that workshop is provided here:

<http://dels.nas.edu/global/besr/BESR-Meeting-Information>

- Several of the speakers from the NWEA were key panelists at the BESR-NAS meeting, including Chris Goldfinger and Yumei Wang. Ms. Wang for example highlighted that likely casualties and costs from a CSZ mega-quake will exceed those of Hurricanes Katrina and Sandy combined, supporting the case for further preparatory actions by decision makers.
- There was a larger than usual audience, both in person and online. There was strong representation from the relevant Federal Agencies and National geoscience societies. Congressional members and staff were invited as well but given this was two days after the election many were not in DC. There were a number of online participants as well.
- A key objective of the meeting was for panelists to identify key gaps and opportunities for further work regarding the science, hazards, and preparedness for a CSZ mega-quake and tsunami. My summary of their comments on priorities is included in the attachment below.
- BESR and COSG have decided to follow up the November 2016 workshop with another event (or events) in 2017. The details are being discussed but a possible step will be one or more webinars, open to the public, to share the results more broadly and possibly drill deeper on selected topics, for example mitigation technologies.
- Thanks are due again to NWEA for hosting your 2015 symposium, which helped to make the case for the 2016 workshop, and helped communicate the risks and impacts of CSZ hazards to geoscientists and decision makers beyond the Pacific Northwest.

Sincerely,

C. Scott Cameron, PhD

Principal - GeoLogical Consulting, LLC  
2726 Bissonnet St  
Ste 240-357  
Houston, TX 77005

Attachments: (John, these are included for your information – given their length I don't think you want to include in your summary).

1) Proposal Presentation to BESR for 2016 Workshop (thanks due to Ray Wells for making his slides available).

2) Summary of Takeaways & Possible Next Steps from the 2016 Workshop (my views, not an official record).