OSSPAC MINUTES September 10, 2019

The meeting was called to order at 9:00 AM PDT at the Oregon State Capitol.

OSSPAC Members Present:

Jeffrey Soulages, Chair Public member

Tiffany Brown, Vice Chair Stakeholder: local government

Matt Crall State agency: DLCD Ed MacMullan Stakeholder: banking

Trent Nagele Stakeholder: structural engineer Dacia Grayber Stakeholder: First responder/NGO

Joe Karney Stakeholder: utilities
Althea Rizzo State agency: OEM
Katie Young Public Member

Walter McMonies Stakeholder: multi-family housing

Bonnie Magura Stakeholder: schools Arnie Roblan State Legislature

Aeron Teverbaugh Dept. of Consumer and Business Services

Joe Karney NW Natural

OSSPAC Members on phone

Greg Ek-Collins State agency: ODOT

Adam Pushkas Stakeholder: building owners

OSSPAC Members Absent:

Susan Romanski Public member Yumei Wang DOGAMI

Tiffiny Mitchell Legislative assembly

Others in Attendance:

Steve Robinson Cascadia Prepared

Chris Goldfinger Oregon State University USGS

Jay Wilson Public Michael Rupp Public

Deb Moller Cascadia Calling

Dick Steinbrugge Public - Retired Engineer

Tim Walsh (via phone) Retired Geologist/Washington State

Meg Reed (via phone) DLCD

Jeni Hall Energy Trust of Oregon

Seth Thomas KPFF/SEAO

David Gomberg State Representative

Al Newnan Public
Dan Cox OSU
Jan Castle Public

Sherry Patterson Lake Grove FD

James Bela OREQ Awareness

Others on phone

Mike Harryman State Resilience Office

Paul Edison-Lam

Bob Houston DOGAMI Meg Reed DLCD

Gary Chock University of Hawaii

Laura Hanson RDPO

1. Administrative Matters

1a/b. Welcome and Introductions

Chair Jeff Soulages opened the meeting and led introductions.

1c. Review and Approval of Minutes from the May meeting

Jeff asked if any changes to minutes. Althea asked to have people send her corrections to the names.

After discussion there was a motion to approve the minutes.

1d. Events Notification

Althea mentioned ShakeOut

1e. New Business

Bonnie requested time during meetings to discuss critical issues. Board needs to have interactions. Recommended 1 hour phone call on months between board meetings.

Jeff said we need to be cognizant of commissioners' times
Dacia said new members lack context and she supports more discussion.
Jeff said we will see if we can find a time.

1f. Location for November 12th OSSPAC Meeting

Althea reported OEM will provide a location and send out that information. This meeting is to be in Salem.

2. Reports

2a. State Agency Reports

OEM: Althea Rizzo discussed Oregon ShakeOut, ShakeAlert, and the new "Be 2 Weeks Ready" program.

DLCD: Matt reports that DLCD has been working with local communities to update local hazard mitigation plans. Work is FEMA funded. Increase in budget from Legislature allowed it to move 4 positions from limited duration to permanent status. Meg Reed discussed the DOGAMI tsunami inundation maps overlay zones being adopted by 7 coastal communities. Community decides acceptable risk. Requires new land divisions to have evacuation as part of the plan. Works is being funded by a NOAA grant.

Ed MacMullan asked the impact of 3309 bill. Reed replied that the model code being used in the land use guidance reference original 379 language and would need to be updated.

Dacia Graber asked who has the authority for risk assessment. Reed replied that the city council or county commission has final say on land use planning and risk assessment.

ODOT: Greg Ek-Collins reported he will be retiring in November. ODOT is continuing projects from 2017 bill and will be doing ShakeOut agencywide. Christina LeClair will be replacing Greg until a permanent staff member is chosen.

DOGAMI: Bob Houston for Yumei: Yumei is working with coastal hospitals on resilience efforts.

DCBS: Aeron Teverbaugh reported that new building codes would be effective October 1, 2019. There has been a staff change and Dawn Bass is Deputy Administrator, BCD.

State Resilience Officer: Mike Harryman expressed appreciation for Representative Gomberg and Senator Roblan attendance at the OSSPAC meeting. HB 5050 would provide OEM to study risk at CEI Hub. Governor Brown and Representative Gomberg will be hosting a series of public meetings on the coast to cover the topics of land use, two weeks preparedness, and HB 3309. Will send Resiliency request package back to legislature to include seismic network stations, 2 weeks ready, regional planning. Waiting for Governor to provide priorities.

3. ASCE 7-16 Tsunami Provisions: Scope, Process, Risk Categories: Gary Chock, ASCE 7 Tsunami Loads and Effects Subcommittee Chair

See attached Appendix A for the slides from Gary Chock's presentation.

Questions from the Commission:

- Bonnie Magura asked to what extent DOGAMI informed the inundation maps.
- Gary Chock replied that DOGAMI maps were deterministic and that the audience for the ASCE code was engineers. Chock indicated that the deterministic DOGAMI maps would not be the best and could lead to 50% failure of buildings during a tsunami. Chock said that DOGAMI models have not validated velocity flow on shore.
- Tiffany Brown said that the coastal counties have been living with, using and planning using the DOGAMI maps. There is a concern with introducing a second set of maps. Asked Gary if they can use their own maps.

Chock replied that it would be dangerous and unreliable.

Senator Roblans said that Ocosta School in Washington State had to use vertical evacuation to get kids out of harm's way.

Chris Goldfinger replied that the failure was not in the probability but in the government's failure to adopt wise land use.

4. ASCE 7-16 Tsunami Provisions: Hazards: Dan Cox, OSU

See attached Appendix B for the slides from Dan Cox's presentation.

Questions from the Commission:

Trent Nagle asked Cox to define the difference between deterministic and probabilistic maps.

Dan replied that deterministic are very precise for a single scenario.

Probabilistic is more coarse but allows to you change based on recurrence and whether will meet or exceed the design tsunami.

Trent replied that many hazards are mapped using probabilistic methods.

Cox agreed for that using probabilistic for design and worst case deterministic for evacuation

Bonnie Magura asked if there are significant differences

Dan replied yes, in some places.

Magura asked why they didn't use the best science

Cox replied that the PTHA is based on Chris Goldfinger's work.

BREAK

5. ASCE 7-16 Tsunami Provisions: Engineering Design: Seth Thomas: SEAO.

See attached Appendix C for the slides from Seth Thomas's presentation.

Dacia Grayber asked about the social aspects of the ASCE building codes.

Dan Cox replied that ASCE doesn't tell you what you ought to do. Ed MacMullan asked Thomas about cost increase to build for vertical evacuation – Ocosta was 10%.

Dan Cox replied that OSU was 3%

MacMullan asked what the useful life of building

Thomas replies 50 years is standard.

Jeff Soulages made comments about faults in San Francisco Bay area.

6. Comments on ASCE and AECOM Tsunami Hazard Modeling – Chris Goldfinger

See attached Appendix D for the slides from Chris Goldfinger's presentation.

Chris Goldfinger added that the DOGAMI maps were semi-probabilistic and used much better base maps than did ASCE. A significant workshop is needed to on the topic.

Trent Nagle asked if it was possible for DOGAMI to use the same model. Goldfinger replied yes, but the ASCE code covers 5 states.

Nagel replied that codes are always evolving and that states can make adjustments to model code.

Bonnie Magura asked about next steps and reminded about code of ethics to use best science.

Goldfinger replied that he hoped there would be some accommodation and that it wouldn't be difficult to make the DOGAMI maps fully probabilistic, not technically difficult.

Jeff Soulages states that the remade maps would look different.

Goldfinger replied that we will be stuck with two maps which would confuse people.

The next update to building codes would be in 2022.

Dan Cox recommended that the state adopts ASCE 16-7.

Seth Thomas recommends that state fund improved maps.

7. Public Comment

There wasn't time for public comment. See the written public comments attached in the Appendices.

The meeting was adjourned at 12:10 PM PDT.

- Appendix A: ASCE 7-16 Tsunami Provisions: Scope, Process, Risk Categories: Gary Chock, ASCE 7 Tsunami Loads and Effects Subcommittee Chair
- Appendix B: ASCE 7-16 Tsunami Provisions: Hazards: Dan Cox, OSU
- Appendix C: ASCE 7-16 Tsunami Provisions: Engineering Design: Seth Thomas: SEAO.
- Appendix D: Comments on ASCE and AECOM Tsunami Hazard Modeling Chris Goldfinger
- Appendix E: Public Comment: Gary Chock, Briefing on the Basis for the Tsunami Hazard Criteria in ASCE 7 Oregon Seismic Safety Policy Advisory Commission Meeting of September 12 2019
- Appendix F: Public comment: Dan Cox, Comments on ASCE 7-16 Chapter 6
 Tsunami Loads and Effects

Appendix G: Public Comment: Jeff Rubin

Appendix H: Public comment: Steve Robinson