

Annual Conference, September 26-29, 2017  
Seaside Convention Center, Seaside, Oregon  
**Managing Assets for the Future:  
Resilient Coastal and Riverine Floodplains**



NORFMA is a nonprofit organization for regional networking on floodplain management issues, including watershed-based environmental quality, economic sustainability, and scientific discover. NORFMA provides a forum for regional communication and cooperation in Oregon, Washington, Idaho, British Columbia, and Alaska.

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## Tuesday, September 26, 2017

**9 am—4 pm in the Seaside Room, 2nd Floor**

**Instructor: Becca Fricke-Croft**

*Training Course: NFIP Floodplain Management 101*

**9 am—4 pm in the Riverview Room, 2nd Floor**

**Instructor: FEMA Region X Staff**

*Training Course: NFIP Advanced Topics – Coastal Construction*

**7 pm—10 pm in the Conference Center Lobby**

*Welcome Social/Informal Get-Together*

- Appetizers and two drink tickets will be provided.

## Wednesday, September 27, 2017

**7 am—5 pm in the Foyer/Lobby**

*Registration Desk Open*

**7 am—8 am in the Necanicum Room, 1st Floor**

*Buffet Breakfast*

**8 am—8:15 am in the Necanicum Room, 1st Floor**

*Welcome and Introduction with Deanna Horton, NORFMA Conference Chair (City of Spokane Valley)*

**8:15 am—10 am in the Necanicum Room, 1st Floor**

*Plenary Session 1*

*Moderator: Hans Hunger, NORFMA Chair (City of Puyallup Public Works)*

- Announcements on New Members Forum – Jesse Reynolds, Otak, Inc.
- FEMA State of the Region – FEMA Region X Staff
- ASFPM Foundation – Dianna Woods, Yakima County

**10 am—10:30 am**

*Break Time – Please visit our Sponsors in the Pacific Auditorium*

- Snacks, coffee, and water provided

**10:30 am—11:15 am in the Necanicum Room, 1st Floor**

*Plenary Session 2 Moderator: Deanna Horton, NORFMA Conference Chair (City of Spokane Valley)*

- Speakers: NFIP State Coordinators or NORFMA State Representatives

**11:15 am—12 pm in the Necanicum Room, 1st Floor**

**French Wetmore, French & Associates, Ltd.**

*Everything I Know About Floodplain Management I Learned in the Army*







### **Noon—1:30 pm**

#### ***Luncheon: Buffet in the Pacific Auditorium***

- Keynote Speaker: *Senator Betsy Johnson (Oregon, North Coast)*

### **1:30 pm—3 pm**

#### ***Concurrent Session A – Mapping and Modeling I: Necanicum Room, 1st Floor***

- Comparison of Deterministic and Risk and Uncertainty Approach Floodplains – *Chris Bahner, WEST Consultants*
- Flood Modeling in the Cloud: Is this a flood analysis revolution? – *Tyler Jantzen, CH2M*
- Tools for Obtaining Community Input into Flood Hazard Mapping Process – *Ferrin Affleck, Atkins*

#### ***Concurrent Session B – Projects I: Seaside Room, 2nd Floor***

- Flood Risk and Floodplain Project Impacts to Agriculture: The Farming in the Floodplain Project – *Spencer Easton, Environmental Science Associates*
- Reducing Flood Risks Along the Cedar River: Deciding Where and How – *Mark Ewbank, Herrera Environmental Consultants, Inc.*
- Near- and Long-Term Alternatives to Save Infrastructures from Wynoochee River Channel Migration – *Henry Hu, WEST Consultants*

#### ***Concurrent Session C – Regulatory I: Riverview Room, 2nd Floor***

- Managing Assets For The Future: Resilient Coastal and Riverine Floodplains – *Kristine Hilt, Blaine County Land Use & Building Services*
- Community-Wide Solutions for Pre-FIRM Structures – *Glenn Davis, City of Salem*
- Community Stabilization and Job Creation in the Lents Floodplain – *Kate Carone, City of Portland Environmental Services*

### **1:30 pm—3 pm in the Seamist Room, 1st Floor**

**Instructors: Marlene Jacobs, Dave Carlton, Wes Shaw**

#### ***CRS Workshop I – CRS and the Changing Tides***

- Part 1 (30 minutes): Introduction to the CRS program, benefits to communities and how to join, participation requirements, and differences between the NFIP and CRS.  
A brief discussion on maintaining Elevation Certificates (310).  
Repetitive Loss reporting requirements (501).  
Hazard Mitigation Planning (510).
- Part 2 (60 minutes): Highlights of the 2017 Coordinator's Manual activities and elements including credit criteria and documentation requirements focusing on the most common, highest scoring, and easy-to-earn credits.

### **3 pm—3:30 pm**

#### ***Break Time – Please visit our Sponsors in the Pacific Auditorium***

- Snacks, coffee, and water provided

**3:30 pm—5 pm**

***Concurrent Session D – Sediment Management: Necanicum Room, 1st Floor***

- Sediment Delivery and Channel Response: Case Studies on the North Fork Stillaguamish and Nooksack Rivers – *Scott Anderson, USGS*
- Contribution of Historical River Meandering to the Skagit River Sediment Load, western Washington – *Eric Grossman, USGS*
- Update on Pierce County Habitat and Flood Capacity Creation Project – Can we get to “yes”? – *Angela Angove, Pierce County Surface Water Management*

***Concurrent Session E – Stormwater: Seaside Room, 2nd Floor***

- The Development and Multipurpose Application of Basin-Wide 1D/2D Stormwater Models in the City of Salem, Oregon – *Erik McCarthy, WEST Consultants*
- Understanding the Risk: Comprehensive System Modeling with XPSWMM – *Matthew Anderson, Innovyze*
- A Watershed Approach for Stormwater Management: Planning for Facility Retrofits and Future Development in Duvall, Washington – *Aaron Booy, Environmental Science Associates*

***Concurrent Session F – Regulatory II: Riverview Room, 2nd Floor***

- Fish out of Water – Quantifying Natural and Beneficial Floodplain Functions – *Marjorie Wolfe, Wolf Water Resources*
- Update on NFIP Implementation of the Endangered Species Act in Washington and Oregon – *Scott Van Hoff, FEMA Region X, Mitigation Division*
- ESA Compliance with Less Pain and More Gain – *Sara O'Brien, Willamette Partnership*

**3:30 pm—5 pm in the Seamist Room, 1st Floor**

**Instructors: Rowan Schmidt, Earth Economics**

**Rob Flaner, Tetra Tech**

**Maggie Skenderian, Earth Economics**

***Workshop – Benefit Cost Analysis and Ecosystem Services, FEMA Funding for Natural Capital***

- This session will provide information and assistance to local agencies that may not have the capacity or expertise to access FEMA resources, e.g., new methodologies for calculating BCAs. Participants will leave with practical knowledge of how new FEMA policies and funding can be accessed to directly benefit their projects. Participants will have an opportunity to identify specific programs, deadlines and prerequisites (e.g., Natural Hazard Mitigation Plans) for funding.

**5 pm—6 pm on the Boardwalk by the Necanicum Room**

***New Member Forum – Introduction***

**6 p.m. in the Necanicum Room, 1st Floor**

***NORFMA Networking***

- Come network with NORFMA friends
- Heavy appetizers and two drink tickets will be provided.





**Thursday, September 28, 2017**

**7 am—4 pm**

**Registration Desk Open (Conference Registration Table)**

**7 am—8:30 am in the Pacific Auditorium**

**Buffet Breakfast**

**8:30 am—10 am**

**Concurrent Session G – Mapping and Modeling II: Necanicum Room, 1st Floor**

- Representation of Vegetation in Two-Dimensional Hydrodynamic Models – *Kevin Coulton, Tetra Tech*
- Hydraulic 1D/2D Modeling of Lower Dungeness River – a Floodplains by Design Project – *Shelby Fowler, WEST Consultants*
- The Paradox of Static Vertical Flood Datums in Rising Sea Levels – *Nicole Kinsman, NOAA/NOS/National Geodetic Survey*

**Concurrent Session H – Coast and Estuary: Seaside Room, 2nd Floor**

- The Southern Flow Corridor, Tillamook, Oregon – *Vaughn Collins, NHC*
- Neskowin Coastal Erosion Adaption Plan – *Sarah Absher, Tillamook County Department of Community Development*
- Fir Island Farm – Estuary Restoration Project: Designing for Uncertainty in Shoreline Flood Risk Reduction and Ecosystem Restoration Projects – *Dave Cline, Shannon & Wilson*

**Concurrent Session I – Initiatives and Programs: Riverview Room, 2nd Floor**

- Chehalis Basin Strategy – Reducing Flood Damage and Restoring Aquatic Habitat – *Chrissy Bailey, Washington State Department of Ecology*
- Corps Portland District Silver Jackets Update – *Paul Sclafani, USACE Portland District*
- Washington Silver Jackets Activity – An Update on Projects and Request for NORFMA Assistance – *Travis Ball, USACE Seattle District*

**8:30 pm—10 am in the Seamist Room, 1st Floor**

**Workshop – Green Infrastructure Case Studies in Portland and Lake Forest Park, Washington**

- *Maggie Skenderian, formerly City of Portland, now Upstream Consulting LLC*  
*Aaron Halverson, City of Lake Forest Park*

**10 am—10:30 am**

**Break Time – Please visit our Sponsors in the Pacific Auditorium.**

- Snacks, coffee, and water provided



**10:30 am—12 pm**

***Concurrent Session J – Climate Science: Necanicum Room, 1st Floor***

- Present and Future Precipitation Frequencies: Renewing the NOAA Atlas 14 – *Brent Bower, NOAA*
- Planning for Future Flooding, Building a Sea-Level Rise Exposure Inventory for Oregon's Estuaries – *Julie Sepanik, Oregon Department of Land Conservation*
- Applying Climate Change Models to Risk Assessment and Flood Hazard Scenario Modeling in Snohomish County – *Stephen Veith, Tetra Tech*

***Concurrent Session K – Projects II: Seaside Room, 2nd Floor***

- Enhancing a River and Protection from Floods In the Second Largest Warehouse District on the West Coast – *Mike Mactutis, City of Kent*
- Deer Creek Floodplain Enhancement: A Fearless Approach to Recreating Stage 0 on National Forest Lands – *Johan Hogervorst, US Forest Service*
- Kerry Island Tidal Restoration – Oregon Estuary – *Mackenzie Baxter, Inter Fluve*

***Concurrent Session L – Emerging Tools: Riverview Room, 2nd Floor***

- FEMA's National Risk Index – Value to Floodplain Management – *Cynthia McCoy, FEMA Region X*
- Exercise your Flood Response Muscles – *Christina Wollman, Perteet, Inc.*

**10:30 am—12 pm in Seamist, 1st Floor**

**Instructors: Marlene Jacobs, French Wetmore, CRS Project Team  
Glenn Davis and Robin Dalke, City of Salem**

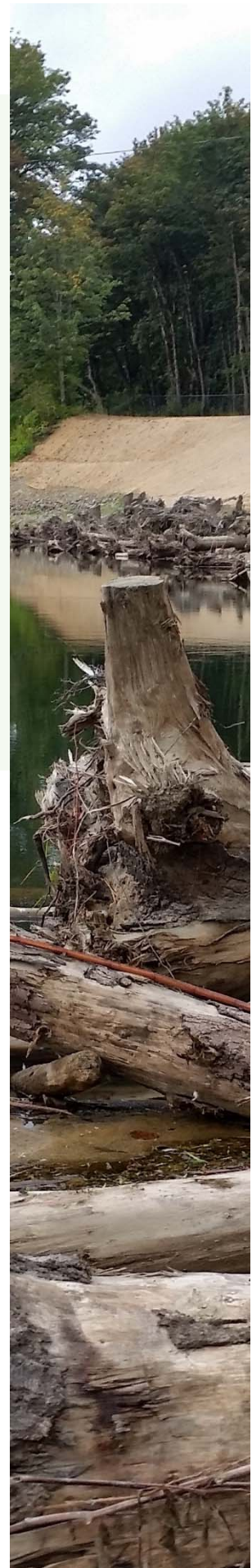
***CRS Workshop II***

- CRS Outreach Projects: How Communities Can Improve Their CRS Public Information Efforts
- This session is intended for all communities that either in the Community Rating System (CRS), are interested in the CRS, or want to improve their public information programs. Outreach projects are essential tools for delivering messages about flood awareness.

**12 pm—1:30 pm**

***Buffet Luncheon in the Pacific Auditorium***

- NORFMA Organization General Membership Meeting (Year In Review) – *Hans Hunger*
- Raffle Drawing
- Presentation of Awards
- Board Election and Results
- General Discussion





**1:30 pm—3 pm**

***Concurrent Session M – Boise River Flooding: Necanicum Room, 1st Floor***

- 100 Days of Boise River Flood Fight, Spring 2017: The Battle Fought and Resilience Lessons Learned – *Brandon Hobbs, USACE Walla Walla District* and *Angie Gilman, Ada County Engineer*

***Concurrent Session N – Mitigation and Planning: Seaside Room, 2nd Floor***

- Flood Economics: How Flood Mitigation Investment Returns Positive Benefits – *Kathleen Boyer, FEMA*
- Skykomish River Trail Planning, Incorporation of Flood Mitigation Open Space Sites for Recreational Planning – *David Wilson, Snohomish County Public Works*
- Washington State Water Infrastructure Needs Assessment – *Gretchen Greene, Maul Foster & Alongi, Inc.*

***Concurrent Session O – Regulatory III: Riverview Room, 2nd Floor***

- From Data to Decisions – Leveraging Hydro-Meteorological Data to Inform the Activation of a Flood Response Operations Plan – *Justin Boyington, City of Salem Public Works Department*
- Adopting Higher Regulatory Standards – *French Wetmore, French & Associates*
- Special Purpose District Woes, State Land Use Goals, and Leveed Land in Oregon – *Colin Rowan, MCDD*

**3 pm—3:30 pm**

***Break Time – Please visit our Sponsors in the Pacific Auditorium***

- Snacks, coffee, and water provided

**3:30 pm—5 pm in the Necanicum Room**

***Closing Plenary Session (General Discussion)***

**5 pm**

***Dinner On Your Own***



**Friday, September 29, 2017**

**7 am—8 am**

*Breakfast On Your Own*

**8:30 am—12 pm in the Main Meeting Room, Inn at Seaside,  
441 Second Street (across from the Convention Center)**

**Proctored by Michelle Gilbert**

*CFM Exam*

- Exam begins promptly at 9 am
- Sign-In begins at 8:30 am

**8 am—12 pm in the Conference Center Lobby**

*Field Tour – The Southern Flow Corridor, Tillamook, Oregon*

- Meet at Conference Center Lobby to coordinate ride-share

**12 pm**

*Conference Officially Ends*







## **Thank you to the Conference Planning Committee!**

**Chair: Deanna Horton, City of Spokane Valley, Washington**

**Rocky Brown, Washington County Department of Land Use & Transportation, Hillsboro, Oregon**

**Michelle Gilbert, Washington State Department of Ecology, Union Gap, Washington**

**Hans Hunger, City of Puyallup, Washington**

**Henry Hu, WEST Consultants, Bellevue, Washington**

**Alex McBride, Parsons Corporation, Burnaby, British Columbia**

**Bryan Pohl, Community Development Director, Tillamook County, Tillamook, Washington**

**John Velimesis, Otak, Inc., Redmond, Washington**

## **NORFMA Board**

**Hans Hunger, P.E., CFM – Chair**

**Michelle Gilbert, CFM – Vice Chair**

**Mark Ewbank, PE, CFM – Secretary**

**Sky Miller, P.E. – Treasurer**

## **Regional Representatives**

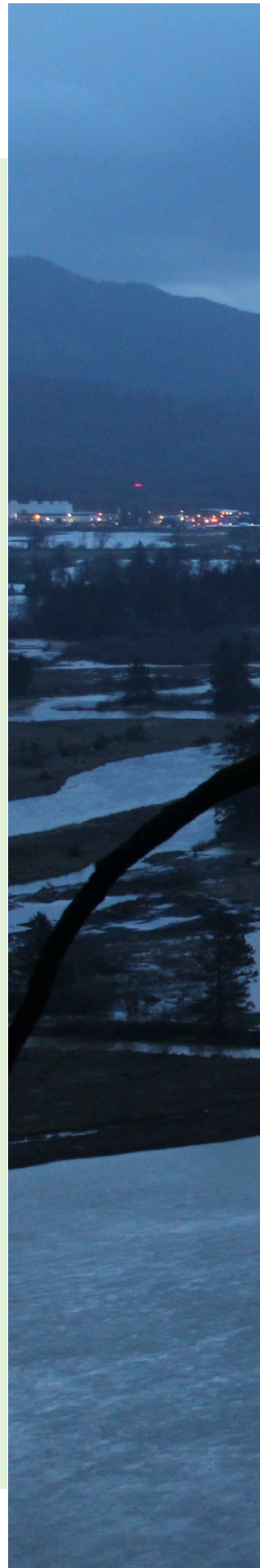
**Alaska – Pamela Ness**

**British Columbia – Alex McBride, P.E., CFM**

**Idaho – Angela Gilman, P.E., CFM**

**Oregon – Rocky Brown, CFM**

**Washington – Christina Wollman, CFM**







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