



REGION-WIDE PUGET SOUND MARITIME DISASTER RESILIENCE WORKSHOP REPORT

MAY 24, 2022



Executive Summary – Regional Maritime Workshop

May 24, 2022

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- Jason Biermann, Snohomish County Emergency Management
- Brendan McCluskey, King County Office of Emergency Management
- Curry Mayer, Seattle EM
- Lis Klute, Kitsap County EM
- Jody Ferguson, Pierce County EM
- Commander Xochitl Castañeda, USCG Sector Puget Sound
- Mark Curtis, Crowley
- Seth Storset, Tote Maritime
- Frank Immel, Global Salvage and Dive
- Ed Madura, Port of Everett
- Ana Fuschetto, Fleet/Facility Security Officer, WSDOT Ferries
- Patrick Gallagher, Marine Exchange
- Mark Glenn, WA EMD
- Scott Honaker, Snohomish County Emergency Management
- Dan Smiley, Washington Maritime Cooperative

Purpose

The Regional Maritime Workshop was designed to follow up on specific strengths and gaps in response and recovery planning from the six earlier workshops. It also gave stakeholders a chance to build relationships and trust between emergency managers and the marine industry, and to inform development of the Maritime Resilience Framework through the identification of maritime assets, plans, and capabilities available after a major earthquake or tsunami incident. For a full recording of the workshop please [click here](https://kingcounty.gov/depts/emergency-)<https://kingcounty.gov/depts/emergency->

Overview

Exercise Participation: The hybrid workshop hosted 125 public and private stakeholders from a variety of organizations: Emergency management; City, County, and State Government; Port Authorities and Operators; Public and Private Ferry Lines; Maritime Shipping Associations; Tug, Towing, and Barge Companies; Merchant Mariners; and the USCG.

Overview/Update on CPOD siting and mapping – This related RCPG project is working with the eight counties in the region to plan where CPODs will be located and how they will serve population islands.

Emergency Management Perspectives on regional catastrophic planning and maritime transportation system integration – Regional Emergency Managers shared their planning assumptions and the many critical transportation challenges they face after a catastrophic event.

Roles and Responsibilities of the Coast Guard – USCG provided an update on their related plans and capabilities that would come into play following a major event.

Maritime perspective Panel – Maritime stakeholders provided their thoughts on the development of the regional maritime resilience framework and unique capabilities and assets available to assist with response and recovery.

Next steps for the development of the Maritime Resilience Framework Brief overview of the framework outline and timeline for phase II of the project and stakeholder provided their input on the process.

Communications and information sharing – Regional leaders discussed the challenges and current plans that could assist in connecting the maritime sector with regional decision makers.



Results

Identified Assets, Resources, Plans or Planning Initiatives:

- DNR has a database of all the equipment available for oil spill response
- Worldwide Response Resource List database. <https://wrrl.world/fmi/webd/WRRRL>
- WA EMD hosts a communications working group that includes urban and rural members that meet several times per quarter.
- Damage Assessment Pilot Project using UNEARTH <https://www.uneearthlabs.com/blogs/rethink-damage-assessments>
- Bainbridge Prepares is a great example of public-private partnerships for disaster resilience <https://bainbridgeprepares.org/teams/flotilla/>
- Similar to the Disaster Airlift Response Team (DART) program, Island County also has a group of island boaters that have drills to help facilitate assistance during a disaster.
- Volunteer certifications related to environmental concerns <https://green-marine.org/> could serve as a model for private sector disaster relief

Identified Gaps & Opportunities

- Barges to bridges - Connecting population islands within major distribution routes with barges across waterways
- How do we get deep water vessels resources into smaller vessels to distribute goods?
- The USCG Marine Transportation System Recovery Unit (MTSRU) will help coordinate maritime sector after a major event. Regular ongoing meetings with MTSRU members and RCPG emergency planners could be useful for building trusted relationships.
- No clear agreement on what radio channels stakeholders will be on after a major event
- Port security, infrastructure and planning related grants often require 25% match or more. Very few organizations can put up the match for regional projects.
- There are no regular ongoing events to allow emergency planners to meet with maritime stakeholders
- WA ESF2 Planning documents do not include information on how to connect with the EOC via radio

Recommendations

Recommendations

The following recommendations were developed based on stakeholder comments, presentations, and panel discussions throughout the workshop to help close gaps highlighted.

- Create regular opportunities for maritime stakeholders to coordinate with emergency management
- Create incentives at federal and state levels for planning resiliency; this could come in the form of assistance for small ports or other organizations to make them more competitive for applying for federal dollars.
- Work to develop a regional rapid damage assessment and reporting program for the Puget Sound.
- Develop a radio frequency contact list to help stakeholders connect with partner organizations during a disaster.
- Host an annual maritime resilience workshop that includes regional emergency management and transportation planners to maintain and development relationships.
- Develop a regional maritime resilience communications working group



Cover photo courtesy of the Port of Everett



**Region-Wide Maritime Resilience Workshop
May 24, 2022**

Project Overview

The Federal Emergency Management Agency (FEMA) provided a Regional Catastrophic Preparedness Grant (RCPG) to King County on behalf of Central Puget Sound partners to address the enormous risk the region faces from a catastrophic earthquake. The purpose of this project is to maximize the ability of the Maritime sector to assist in the disaster response and recovery from a catastrophic earthquake when road, rail, and air transportation may be disrupted for weeks, months, and even years.

Puget Sound waterways provide a means to transport all manner of personnel, goods, and materiel that may be needed to respond to, recover from, and restore the region after a catastrophic earthquake. The RCPG project focuses on six maritime areas across Puget Sound, involves public and private partners from the region and Alaska, and works to identify maritime assets and capabilities that could play a role in response, recovery, and restoration efforts.

Following a catastrophic earthquake, supplying the Puget Sound Region with life-sustaining commodities such as water and food will require a tremendous, coordinated effort. Current planning to supply Community Points of Distribution (CPODs) assumes that resupply will come via land routes over the Cascade Mountains from the east or by air. These delivery routes are not assured due to the significant potential for large landslides to block the few mountain passes, for bridges to collapse, for airfield runways and facilities to be significantly damaged, and for uncertain availability of aircraft.

The Regional Catastrophic Preparedness Grant (RCPG) project focuses on public and private maritime assets in the following six maritime areas of focus in the Puget Sound Region, and also involves stakeholders from the State of Alaska:

Bellingham
Seattle

Bremerton
Tacoma

Everett
Olympia

Workshop Overview

Facilitated by the Pacific Northwest Economic Region (PNWER), the regional workshop was held on May 24, 2022 at the Foss Maritime Center in Tacoma WA. The workshop focused on ports and surrounding maritime transportation system assets and capabilities. The workshop was designed to identify specific strengths and gaps in response and recovery planning, build relationships and trust between emergency managers and the marine industry, and to inform development of the Maritime Resilience Framework. A full recording of the workshop can be found [here](#).

125 public and private stakeholders attended the workshop from a variety of organizations. 67 attended virtually and 58 attended in person. Examples of the disciplines represented include:

- Emergency Management
- City, County, and State government
- Port Authorities and Operators
- Public and Private Ferry Lines
- Maritime Shipping Associations
- Tug, Towing, and Barge Companies
- Merchant Mariners
- U.S. Coast Guard

Workshop Goal: Work to identify maritime assets, plans and capabilities available that could play a role in response, recovery, and restoration efforts after a major earthquake and subsequent tsunami.

Sponsor: Funding for the workshop was provided through a Regional Catastrophic Preparedness Grant (RCPG) funded by the Department of Homeland Security. The King County Office of Emergency Management executes the grant on behalf of the eight-county Regional Catastrophic Planning Team (RCPT).

Workshop Design: A planning team consisting of regional and local stakeholders provided input during several planning meetings on the development of the agenda and by identifying specific speakers and topics for discussion. The planning team included:

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|--|--|
| ● Mark Curtis, Crowley | ● Norm Smith, Port of Bellingham |
| ● Seth Storset, Tote | ● Jan Glarum, Kitsap Emergency Management |
| ● Patrick Gallagher, Marine Exchange | ● Russ Read, Port of Seattle |
| ● Frank Immel, Global Salvage and Dive | ● Louis Cooper, Port of Tacoma |
| ● John Veentjer, Harbor Safety Committee | ● Jennie Foglia-Jones, Port of Olympia |
| ● Tieka Adeogun, Tacoma Emergency Management | ● Conley Booth, Port of Olympia |
| ● Amy Lucas, Snohomish County Emergency Management | ● James Weaver, Port of Bremerton |
| ● Sasha Rector, King County Emergency Management | ● Ed Madura, Port of Everett |
| ● Tim Lupher, USCG MTSRU | ● Brandon Hardenbrook, PNWER |
| | ● Eric Holdeman, Center for Regional Disaster Resilience |
| | ● Jeannie Beckett, Beckett Group |

Workshop Summary

Opening Remarks

Brendan McCluskey, Director, King County Emergency Management Department:

Brendan McCluskey emphasized the important role the maritime industry will have in supporting the emergency response effort during a Cascadia Subduction Zone event. Our industries have a duty to reinforce the Puget Sound so that it is as resilient as possible. The maritime industry is a viable option for moving personnel, lifesaving efforts, resources and much more. This will be vital considering the potential damage bridges and roadways will endure and it could be several months to years until

infrastructure is usable following a CSZ event. He then emphasized the important role that we all have to build, strengthen and support relationships between emergency management and the maritime industry.

Commissioner Dick Marzano, Port of Tacoma:

Port Commissioner, Dick Marzano, welcomed everyone to Tacoma and complimented the planning going on. He stated that a disaster will eventually happen and the aftermath will be dictated by preparedness efforts occurring right now.

Project Overview & Lessons Learned

Sasha Rector, Regional Catastrophic Program Coordinator, King County Emergency Management:

Sasha Rector explained that the Puget Sound Regional Catastrophic Preparedness Project consists of two phases: In Phase One, a series of workshops will introduce stakeholders to disaster risks, review existing response and recovery plans, and discussed assets and capability gaps; Phase Two facilitates development of the Maritime Resilience Framework. The Framework will create an adaptable and usable document that identifies key maritime assets to aid in emergency efforts and resource distribution.

Brandon Hardenbrook, Deputy Director, PNWER

Brandon Hardenbrook emphasized Post-Earthquake Response Challenges which include communications and information sharing, rapid damage assessment, marine volunteer management, debris removal and coordination, contracting and pre-set MOU, staging areas for supplies and fuel and the possibility the maritime sector is not integrated in many emergency management plans.

There was an opportunity to discuss maritime resilience capabilities and planning throughout the region. Some of which included:

- Marine volunteer management program in several jurisdictions
- Whatcom County - Tsunami Response action plan
- WA EMD & DNR are leading Tsunami planning efforts
- RCPG counties developing critical transportation prioritization planning
- Smaller port capabilities with mobile cranes and generators
- Thurston county has a well-crafted drone policy in place
- Small ferries - King County Water Taxi could be a useful asset
- Marine capabilities with Alaska ties
- TOTE Maritime has spare ramps for added roll-on-roll-off capability
- Fuel can be pumped from offshore using floating houses from barges
- Local companies available to assist with damage inspection through underwater drones and unique salvage capabilities

Participants were asked to share with each other about their biggest takeaways from the earlier workshops and gaps that they discovered. Key takeaways included:

- Communication and Collaboration - #1 achilles heels
- We need ongoing sustainable opportunities to meet as a region. Is there funding to support an annual RCPG conference in the Puget Sound?
- Biggest concern is people planning on resources and capabilities that might not be available. Manage expectations.
- Limited heavy lift capabilities available, and those assigned by USCG and Federal partners
- MOUs that exist - be cautious that the capabilities still might not be available
- Communities aren't going to be able to assign many of these capabilities and resources
- Communities need to have pre-drafted "assignments", to push up to the feds to assign needed capabilities.
- The USCG/feds will take into account all the state, local, federal needs in assigning capabilities
- The ferries that communities might have written into their plans, might not be written into the Ferries plans. They might be directed and assigned by State EMD. Towns might assume that ferries are going to be usable in their communities, but ferries might be commandeered.
- Prioritization is not an exact science, so communication is absolutely vital in disasters
- Having agreements and MOUs in place before an emergency makes responding to the emergency easier
- There is a need for more money available for rural ports for resilience planning.
- There is a significant challenge for any one port contributing match for multi-port resilience planning as required by port security grants.
- Lack of skilled personnel to perform damage assessment at ports that require specialized capabilities. Most ports contract out their emergency processes
- Multi-jurisdictional and public-private partnership and coordination is absolutely essential.
- Update the radio communication plan, create a maritime network
- Plans need to be coordinated across agencies, not in a vacuum, at all levels of government

Overview & Update on CPOD Siting and Mapping

Amy Lucas, Snohomish County Emergency Management

According to regional assessment statistics generated in 2018 from UASI, 96 hours post a catastrophic event, 359,600 people would require shelter, and 1,681,016 people would require food and water. The region is only currently capable of housing 88,814 people and providing food and water for 138,000 people, leaving a gap for 270,786 people without shelter and over 1.5 million people without access to food and water. The 2019 grant project is focused on improving the region's response post-earthquake. This includes evaluating different variables, including population mobility post-event and needs for food and water distribution. The impacts of a catastrophic event on critical infrastructure also need to be assessed. This project also includes working with Community Points of Distribution (CPODs) to activate sites based on population need and to evaluate routes to resupply the sites.

Lucas has also been working with critical transportation mapping. This project has two categories: Final Mile Distribution and the Maritime System. Final Mile distribution involves priority routes for clearing debris and mapping how best to use the shipping resources available to this region, such as barges, large docks, and cranes for distribution in a time of crisis. The Maritime System identifies rivers in the Puget

Sound region that are navigable and deep enough to use for transportation to populations further inland from the sound.

Emergency Management Perspectives on Regional Catastrophic Planning and Maritime Transportation System Integration

Moderator: Eric Holdeman, Director, Center for Regional Disaster Resilience

Panelists:

- Jason Biermann, Director, Snohomish County Emergency Management
- Brendan McCluskey, Director, King County Emergency Management
- Lis Klute, Director, Kitsap County Emergency Management
- Jody Ferguson, Director, Pierce County Emergency Management
- Curry Mayer, Director, City of Seattle Emergency Management

Eric Holdeman began the discussion by asking what transportation challenges the region would have to overcome in the aftermath of a CSZ event?

Jody Ferguson responded that Pierce County specifically would look at impact to rail lines, the Port, waterways, state roadways and interstates – as well as how to mobilize critical resources and navigate roadblocks, debris removal, etc.

Jason Biermann stated that Snohomish County will have multimodal roadway blockages, landslides, bridge failure, damages to Paine Field, etc. which will put massive pressure on roadways for commuters – kids at school, parents at work, etc.

Lis Klute noted that Kitsap County will endure more unique challenges considering that they are an island county, and 25 islands that could be formed with infrastructure loss, as well as five Navy installations. Their concerns will include nuclear, rail lines, ferry terminals and water transportation.

Brendan McCluskey noted there will be many aspects that affect transportation including the status of ports, bridges, overpasses, passes, roadways, rail issues, fuel challenges, damages to pipeline, SeaTac, Boeing.

Jason Biermann identified that we collectively need to think outside of jurisdictional boundaries because the event will not unfold that way.

Holdeman followed this question by asking what form public private partnerships take in your county? What is the vision?

Brendan McCluskey responded that these workshops are good for this purpose and we certainly need to do more. We need to engage the willing private sector to give and get information as if they were another government partner. Infrastructure is largely owned by the private sector. Whatever the vision

is, it needs to be regional or even state-wide. For example, Boeing has facilities throughout the state - whatever they do needs to be consistent across counties where appropriate.

Curry Mayer asked that the private sector let her know how she can be the most helpful for them and identify what they need from her.

Lis Klute stated that Kitsap approaches the relationship between the two by incorporating the public and private into everything they do. They use funding to enhance the relationships and programs that integrate into these projects such as their volunteer program, where volunteers tell them what they need, not the other way around.

Jason Biermann responded that his vision would be to put the private sector at the forefront of what they do everyday. The public sector's role should be to mobilize businesses and then the government can fill in any gaps.

Jody Ferguson noted that the government often overthinks and tries to replicate what the private sector does way better, so the public sector should rather determine how to mobilize and support them.

Eric Holdeman asked what the ideal outcome in the next phase of the planning process to connect emergency management to the broader resiliency efforts in the counties would be?

Jason Biermann responded that he hopes to see a shared understanding of needs and how we can support one another.

Lis Klute responded that identifying assets and integrating them into response efforts is a priority for her team.

Curry Mayer responded that through continued efforts, she hopes we all establish relationships with each other and can communicate with one another even when traditional lines of communication are unavailable.

Audience Questions & Discussion:

How will fuel be distributed?

Lis Klute: Fuel stations are required to have hand pumps. Eli King is working with Clallam County on an initiative to address this.

We know resources will be distributed and everyone needs everything. How will things be distributed/deconflicted/prioritized?

Jody Ferguson: The reality of response is how do you prioritize every group and explain to groups that do not receive resources why that was.

How would equity factor into priorities when you have shortages?

Curry Mayer: Prioritization will come down to communicating and being able to ask for something. The reality is that we will all likely be somewhat on our own for a while. What are you doing for vulnerable communities *before* the event?

Brendan: As emergency managers, we do talk on a regular basis. As far as prioritization, we could come up with a scheme to do so, but we have people above us that will dictate how resources are allocated depending on their interests.

What kind of accommodations have you made for law enforcement to be on the water? What is access to offshore geographical areas for catastrophic preparation? Can you put a barge offshore for catastrophic response?

Curry Mayer: I would call the USCG Sector Puget Sound – SPD, sheriff, SFD, so I don't have to worry about that.

Jason: How do we get deep water vessels resources into smaller vessels to distribute – that is the level of detail we are trying to develop. We all need to think of scale – what if we can fly 250 lbs of food on a float plane? That will help a couple homes. We will need containers full of resources.

Lis Klute: Law enforcement and the Navy has vessels.

Tami Allen: <https://bainbridgeprepares.org/> - planning to avoid the need of offsite support.

Roles and Responsibilities of the US Coast Guard

Commander Xochitl Castañeda, Chief, Emergency Management Department, USCG Sector Puget Sound

Commander Xochitl Castañeda presented on the roles and responsibilities of the US Coast Guard during a CSZ event. As Sector Commander, Captain Hilbert of Sector Puget Sound carries many different authorities. These include:

- Captain of the Port, which gives the authority to control a person, ship, or facility on the waterway, as well as implement safety zones during an emergency including shutting down waterways and controlling traffic
- Federal Maritime Security Coordinator directs the fire department, sheriff, law enforcement, Navy to communicate and align on security areas of interest
- Federal On-Scene Coordinator acts to prevent pollution through federalizing an event or requiring the responsible party coordinate clean-up (oil spill, etc.) Controlling pipeline damage would be a main priority after life saving efforts during a CSZ event.
- Officer in Charge of Marine Inspection secures the Port and assesses that it is up to standards
- Cooperative Vessel Traffic Service Coordinator manages staff and coordinates with Canadian authorities

- Search and Rescue Mission Coordinator relies on staff, partners, and good samaritans (duty under US law) to help mariners in distress (primary priority after a CSZ event)

Commander Castañeda included statistics about the Puget Sound Region’s port capabilities to demonstrate the extensive importance of facilities and assets in the region. These statistics included:

- 4th largest domestic port complex
- 3500 sq miles
- ~ 2586 deep draft ships a year
- 4.1 M TEU containers through Seattle and Tacoma (3rd largest in nation)
- 2 national marine sanctuaries
- Gateway to the arctic
- 15 billion gallons of oil moved annually
- Alaskan fishing fleet homeport ~1600 vessels
- 1.3 million recreational boating population
- Washington State Ferry System ~ 23 vessels & 22.4 million riders yearly
- Cruise ship industry ~ 850K passengers & and 205 ships yearly
- 14 separate tribal nations
- Large military & refinery presence

The Marine Transportation System Recovery Unit (MTSRU) is a part of the overall response and recovery effort following a significant port disruption. The Mission of the MTSRU (following Search & Rescue) includes tracking and reporting status of the Marine Transportation System (MTS), understanding critical commerce pathways, developing courses of action, providing an avenue of input for stakeholders, and recommending priorities for MTS recovery. Composition of the MTSRU is as follows:

- Federal Representation: USCG, DOD, SUPSALV, USACOE, CP, TSA
- State and Local Government: Port authority, emergency management, fish and wildlife, marine police
- Local Industry Representation: Shallow draft Vessel operators
- Deep draft Vessel Operators
- MTS Facility Owners/Operators
- Shippers & Freight Forwarders
- Trade Organizations
- Recreational Boating Assoc.
- Railroad Companies
- Shipyards/Fleeting Operations
- Towboat Operators

- SPS MTSRU

- Waterways
 - Aids to navigation
 - Anchorages
 - Channels
 - Locks
 - Monitoring System (VTS)
- Cargo
 - Breakbulk facilities
 - Chemical facilities

- Container facilities
 - Non-Container facilities
 - Ro-ro facilities
- Ports
 - Port of Bellingham
 - Port of Everett
 - Port of Olympia
 - Port of Port Angeles
 - Port of Seattle
 - Port of Tacoma
- Passenger Vessels
 - Ferry terminals
 - Passenger vessels
 - Ferries
- Services
 - Marine Exchange
 - Pilots
 - Tugs
 - Labor
 - Pier side services
- Petroleum
 - Refineries
 - Petroleum
 - Petroleum vessels
- Military
 - Ports
 - Petroleum
 - Shipyards

Questions:

How are we to communicate damage reports to you? Would that be through VHF radio?

We will take them anyway we can get them – conference calls, satellite, VHF, etc. It will be challenging because we do not know what will still be standing.

Where would you see the connection between USCG and CPODs?

Potentially and likely through the state – whatever you need as emergency managers, and we will also work with the local and port communities

How often does the MTSRU meet?

Reach out to Tim Lupher, he leads the MTSRU and can get you on the list.

What dictates whether or not a port is closed?

That is very much a case by case basis determined through self assessment. Closing and reopening is difficult when the event’s arrival cannot be predicted.

Maritime Perspective on the Development of the Regional Maritime Resilience Framework and Unique Capabilities & Assets Available for Response & Recovery

Moderator: Matt Morrison, Executive Director, PNWER

Panelists:

- Mark Curtis, Director of Emergency Preparedness, Crowley Shipping
- Frank Immel, Business Development Account Exec., Global Diving and Salvage
- Seth Storset, Director of Safety, TOTE Maritime
- Ed Madura, Security Director, Port of Everett
- Ana Fuschetto, Fleet/Facility Security Officer, Washington State Ferries

Matt Morrison began the discussion by asking the panelists to briefly discuss unique assets their companies can provide.

Mark Curtis responded that Crowley Shipping can offer cargo, tug and towing services, barges, trucking, oil tankers, gas stations, oil facilities, wind turbines, etc. Their network is spread across the US and Caribbean.

Frank Immel responded that Global Diving and Salvage is a diving & salvage recovery company.

Seth Storset responded that TOTE Maritime can offer ro-ro operations with external ramps that can be repositioned. TOTE has three ramps in Alaska and five in Tacoma.

Ana Fuschetto responded that Washington Ferries has 19 terminals throughout the entire Puget Sound and 20 vessels. They work closely with Port partners and USCG. They are ro-ro in terms of bringing on walk-on and civilian passengers and can bring on many different types of vehicles. Medical transports are also a capability.

Ed Madura responded that there are 83 ports in Washington – In Everett specifically, the Port was set up for economic development – something they do everyday and would certainly do after a disaster.

What led the port to be the first to have a port resiliency plan?

Ed Madura responded that the port resiliency plan was likely a result of his background with Snohomish EMD.

Mark Curtis stated that in the event of a large-scale emergency, Crowley has an emergency response plan that consists of setting up incident command anywhere with internet access without having to be there in-person. He followed by saying the virtual aspect is vital in order to get the right people into the right positions to make important decisions.

What specific policy recommendations the panelists have to build a more resilient region?

Frank Immel responded that when this earthquake happens, no one knows what the result will be. If you do not know what you have before the earthquake – how are you going to use it in the aftermath. Information is key, and this means spending money potentially for nothing in the event the earthquake does not happen. There is a lot of technology available to assess damage and he recommends policymakers invest in them on behalf of emergency management.

Matt followed his previous question by asking how we can be more resilient in the Puget Sound through investments?

Seth Storset responded that plans are always at most 80% planned, but you can never know the full extent of how an event will unfold until it happens. He recommended that we invest in mobile communication units.

Ana Fuschetto responded that the Washington State Ferry system has a hybrid emergency operations center which can be activated in seconds as well as physical EOC. It is important to have redundant communications systems as well as investing in infrastructure, including rigid inspections and regular maintenance. WSF does so through having a terminal engineering staff on site.

What is the current plan if a tsunami warning is sent out when boats are in the middle of loading?

Ana Fuschetto responded that the ships would stop loading and if possible, evacuate to get to deeper water. The staff and vessels would be on standby until they are cleared to go to a dock. WSF falls under WSDOT, and would take orders from them. The ferries and terminals will likely have sustained damages as well as staff and fuel constraints.

While developing a maritime resilience framework – what gaps need to be filled?

Ed Madura compared emergency management to colander with a whole bunch of holes in it – not any one thing that will make a huge difference but a lot of little things. Logistics are a system of many working parts.

What do you need from emergency management post event? How much fuel storage?

Mark Curtis responded that his company would need contracts from them, Curtis will not know what is needed of them until they are told. A Cascadia type event will be federalized – almost all Crowley vessels have American flags and American staff. Crowley can go from port to port, and will be allowed there. They have built their own docks and cranes and can use them for relief efforts

Frank Immel responded that Global has already worked with the coast guard and federal government so they will be able to mobilize fairly quickly. They also do not have many vessels so their fuel needs would be fairly limited.

Seth Storset responded that TOTE vessels have dual LNG diesel engines.

Questions:

Where are the barges coming from and on what timeline?

Mark: Depends on what contract is already in place, oil tankers – we have a marine response plan, a vessel can become a vessel of opportunity, what is typically in the area, what is on hand at any given moment. Salvage and marine firefighting. We won't bring anything in during a

Cascadia event until USCG clears it – retrofitting infrastructure to be able to withstand a catastrophic earthquake.

Next Steps for Development of the Maritime Resilience Framework

Dave Cruz, Senior Port Planner, Moffatt & Nichol

Dave Cruz gave an overview of the framework that will eventually be developed in the next phase of this project. The framework will incorporate maritime and transportation resources to use, receive, and distribute life sustaining commodities to CPODs with maritime assets as well as act as a document that describes actions and communications needed to fulfill purpose.

The 9 Regional Catastrophic Planning Team (RCPT) and MRF counties include:

- Port of Bellingham – Whatcom County
- Port of Everett – Snohomish County
- Port of Seattle – King County
- Port of Tacoma – Pierce County
- Port of Olympia – Thurston County
- Port of Bremerton – Kitsap County
- Port of Anacortes – Skagit County
- Port of Hoodport – Mason County
- Port of Coupeville – Island County

Current Plans & Data include:

- Whatcom County (Port of Bellingham)
 - Comprehensive Emergency Management Plan (CEMP)
 - Disaster Debris Management Plan
 - Severe Storm Action Plan
 - Tsunami Action Plan
- Snohomish County (Port of Everett)
 - CEMP and Annexes 2019
- King County (Port of Seattle)
 - CEMP and Annexes 2020
- Kitsap County (Port of Bremerton)
 - CEMP
- Pierce County (Port of Tacoma)
 - CEMP
 - Emergency Support Function (ESF) include 1 -transportation, 2 - communications, 3 - public works, 4 - firefighting, 5 - information and planning, 6 - mass care, 7 - logistics, 8 - public health and medical services
- Thurston County (Port of Olympia)
 - CEMP
 - ESF include 1 - transportation, 2 - communications, 3 - public works and engineering debris management plan

Hazard Data & Modeling include:

- Washing State Department of Natural Resources (DNR) – earthquakes and tsunamis
- Washington State Military Department Emergency Management Division (EMD) – earthquakes and tsunamis
- University of Washington (UW) – earthquakes and tsunamis
- Washington Department of Transportation (WSDOT) – highway bridges
- U.S. Geological Survey (USGS) earthquakes and tsunamis
- Federal Emergency Management Agency (FEMA) – potential loss estimates

Next steps include stakeholder considerations as well as physical data input.

Stakeholders had the opportunity to discuss the framework and offer comments. Some of the key points raised are listed below.

- When can we find out which ports are open after a disaster? (question for MTSRU)
- Can the USCG use private sector assets to make a determination on opening a port?
- What level of disaster (ie. gov declared, or presidential) “waives” special permits to re-constitute or repair facilities?
- Do we need additional legislative authorization to expedite permitting?
- Amid the myriad of environmental and emergency response regulations already driven by the government, how do we incentivize the private sector regarding disaster relief? A self-assessment with a requisite ranking on accreditation is suggested similar to “Greenmarine”.
- Similar to the DART program, Island county also has a group of island boaters that have drills to help facilitate assistance during a disaster.
- We need an up to date asset database (vessels, equipment RO_RO, barges location, availability)
- Communication resilience with use at amateur radio/vhf from vessels to EOC.
- Volunteer example- www.bainbridgeprepares.org if HUBS=all purpose CPOD, comms, medical, family reunification, shelter, alternative transportation, animal care, map your neighborhood psychological first aid business recovery, churches, food resiliency, alt power, water, compost toilets
- Consider presenting to the Pacific Coast congress of harbormasters and marina managers to address critical maritime infrastructure, rapid damage assessment, private/public/partnerships, www.pccharbormasters.org
- Port Harbor Masters need to be brought together and Capacity built on this project the outcomes and outputs and engaged in a catastrophic planning group
- USCG Vessel traffic service conductor (US and Canada)
- Explore a damage assessment pilot program like UNEARTH <https://www.uneearthlabs.com/blogs/rethink-damage-assessments>
- Explore creating an Office of resiliency at the state level to help connect resilience planning across jurisdictions and communities.
- Create incentives at federal and state levels for planning resiliency

- Impact of chemical/hazardous materials spills and releases and the lack of resources to address the situation along the maritime area in a 9.0 scenario is not being integrated into the planning.
- Intermodal stakeholders with freight-forward assets, bring them into the planning. Need to make connection to final mile delivery under conditions when in CS2 here will be creation of random-decentralized networks
- Create regular opportunities for maritime and emergency management planners
- Encourage ports to work with WA EMD and DNR for Tsunami planning
- Develop emergency management and maritime working group
- Develop and coordinate rapid damage assessment strategies
- Volunteer management planning needed
- Explore resources to host annual event like today's meeting
- During oil spills, we have a database of all the equipment and we can move assets – mimic Puget Sound's assets for maritime resiliency for available equipment - roll off ramps, underwater drones, etc. – “Who has what where”
- Appreciated the development of the concept that every bridge has potential to create an island because it is really important to plan for the potential of that reality
- Which marinas/ports are amateur radio trained and able to connect with emergency management?
- “BEARS” & “KEARS” - Bainbridge Emergency Auxiliary Radio System & Kitsap
- MSRC (Marine Spill Response Corporation) & WISMEC can be activated in an emergency that may not be known
- Need to have the ability to do rapid contracting
- “Assets” – have different meanings and in the maritime world, they mean vessels
- Worldwide Response Resource List database. <https://wrrl.world/fmi/webd/WRRL>
- Dept of ecology has database of maritime spill response assets and boats
- Build a series of workshops that cover the key framework topics and then continue on covering the next steps (i.e. coms, mitigations, etc.)

Communications and Information-Sharing

Moderator: Jeannie Beckett, Principal, The Beckett Group

- Mark Glenn, CIO, IT Director, WA EMD
- Scott Honaker, Communications Coordinator, Snohomish County
- Capt. Dan Smiley, Response Manager, WA State Maritime Cooperative
- Patrick Gallagher, Executive Director, Marine Exchange Puget Sound

Discussion Questions:

- What are the most critical gaps or weaknesses in existing communication and information-sharing protocols, strategies, plans and agreements that need to be resolved in order to expedite the recovery of some limited maritime transportation after an emergency?
- How do you communicate with volunteers, particularly self-mobilizers? Who should help organize and coordinate? What are possible models of success?

- What information sharing and communications systems should be used?

Jeannie Beckett began the discussion by asking, what the plan is immediately following an earthquake, what will define communication, and what procedures will be followed? Do panelist's agencies have pre-planned messaging or is it developed in the moment?

Mark Glenn responded that his agency follows a comprehensive emergency management plan, which gives them the ability to determine what goes where once the event has hit. We get requests from the state EOC and we look at what resources are available. He stressed that everything they do depends on relationships and this is key. Events like this help develop relationships and enhance planning. The more we can do to know folks ahead of time the better. We can always do a better job talking to each other. We have a working group that meets three times a quarter and we want to be part of the maritime communications group that was mentioned.

Scott Honaker responded that following an earthquake, his team will activate the EOC and can activate radios if they still have the ability to do so. They all take radios home with them. Once communication is established, they will connect with different departments to get damage assessment and situational awareness. His agency also has virtual EOC capability which utilizes Microsoft Teams and pre-made forms. His agency utilizes HamWAN radio which does not overlap with commercial infrastructure. They reach out to cities and departments to see if they are activated and get assessment information. PIOs have canned messages that can be sent out via social media and other methods.

Dan Smiley responded that his agency has invested in UHF radio infrastructure. We have a plan for our team to come up on a predetermined radio frequency. We have several repeaters that allow us to communicate with our ops center. If power is not on we are back to radio. We have invested in radios to operate on commercial bands for oil spill but they also can connect with HAM radios and other groups that use different frequencies.

Patrick Gallagher responded that the Marine Exchange exists to serve and support the maritime industry which consists of a 24/7 watch standards and monitoring vessel traffic system, as well as linking arriving vessels with shoreside infrastructure and any service that our members want. We also administrator several groups including; WA Maritime Cooperative, Seattle Propellor club, Harbor Safety committee, etc. We collect information and data and share info with our members. The Marine Exchange has backup generator capabilities and we want to maintain the watch. We have 4 fulltime watch workers. It could be a challenge to get these folks to Seattle in a disaster. Staff availability will be a problem across the board.

Jeannie Beckett followed up by asking which priorities each agency should work on? She pointed out that everyone has radio capabilities in the group and yet no one can talk to each other. What is the channel going to be? Who is going to answer it? Who is going to take the information available?

Dan Smiley stated that the ESF2 plan from the state. There is no information in the plan that allows me to contact the EOC by what frequency. There is no clear list of frequencies to report damage and to whom. There is no document that lists who to call and on what frequency and this is needed.

Patrick Gallagher - The best networks out there now are social networks. Through the network effect, the more you use it the better it gets. We want to build the network and create more capacity and redundancy.

Mark Glenn stated that knowing the scenario and the interdependencies is key. He stated that he believes as a group, there is not enough practice done together. One way to address inconsistencies in communication is to simulate the kinds of scenarios that would likely happen in a CSZ event and force EOCs to operate without communications. We need more practice and we need to exercise by taking down the internet and communications. We need to establish and maintain a roster of who to call and ensure it stays current. We need to reach out to others and meet new people who we may not know. Our working group is called the WCWIG and we are trying to reach a broader audience to involve everyone.

Scott Honaker - We have been using MS Teams to exchange documents for situational awareness. At the EOC we have a number of internet solutions including satellite. We also have a system called HAMWAM that offers high speed connectivity between EOCs and Hospitals. For example we are connected to the Seattle OEC through this network. It bypasses network overloading and does not touch commercial infrastructure. It's as good as a normal cable network connection.

Closing Remarks

Rep. Cindy Ryu, Washington State House of Representatives

I am not the subject matter expert, but you all are. I need to know where I can help, develop these relationships, and support you through policy. We want to help you get ahold of as much federal funding as possible and we want to help find ways to provide matching funds to allow for these opportunities in our state. Thank you for this effort and for helping me understand the opportunities and challenges we face after a major disaster.

Recommendations

The following recommendations were developed based on stakeholder comments, presentations, and panel discussions throughout the workshop to help close gaps highlighted.

- Create regular opportunities for maritime stakeholders to coordinate with emergency management
- Create incentives at federal and state levels for planning resiliency; this could come in the form of assistance for small ports or other organizations to make them more competitive for applying for federal dollars.
- Work to develop a regional rapid damage assessment and reporting program for the Puget Sound.

- Develop a radio frequency contact list to help stakeholders connect with partner organizations during a disaster.
- Host an annual maritime resilience workshop that includes regional emergency management and transportation planners to maintain and development relationships.
- Develop a regional maritime resilience communications working group

PUGET SOUND REGION MARITIME DISASTER RESILIENCE WORKSHOP

Tuesday, May 24, 2022 | 9:00am-3:00pm

AGENDA

9:00-9:30AM

WELCOME & OPENING REMARKS

- Brendan McCluskey, Director, King County Emergency Management
- Commissioner Dick Marzano, Port of Tacoma

9:30-9:40AM

PROJECT OVERVIEW & LESSONS LEARNED

- Sasha Rector, Regional Catastrophic Program Coordinator, King County Emergency Management
- Brandon Hardenbrook, Deputy Director, Pacific NorthWest Economic Region

9:40-10:00AM

TABLE DISCUSSION & REPORT OUT

Table Discussion: What were your personal lessons learned and recommendations from the workshops?

10:00-10:20AM

OVERVIEW & UPDATE ON COMMUNITY POINTS OF DISTRIBUTION (CPOD) SITING & MAPPING

- Amy Lucas, Community Resilience Program Manager, Snohomish County Emergency Management

10:20-11:10AM

EMERGENCY MANAGEMENT PERSPECTIVES ON REGIONAL CATASTROPHIC PLANNING & MARITIME TRANSPORTATION SYSTEM INTEGRATION

- Moderator: Eric Holdeman, Director, Center for Regional Disaster Resilience
- Jason Biermann, Director, Snohomish County Emergency Management
- Brendan McCluskey, Director, King County Emergency Management
- Lis Klute, Director, Kitsap County Emergency Management
- Jody Ferguson, Director, Pierce County Emergency Management
- Curry Mayer, Director, City of Seattle Emergency Management

11:10-11:30AM NETWORKING BREAK

11:30AM-12:00PM

ROLES & RESPONSIBILITIES OF THE COAST GUARD

- Commander Xochitl Castañeda, Chief, Emergency Management Department, USCG Puget Sound

12:00PM BREAK FOR LUNCH

12:30-1:15PM

WORKING LUNCH: PANEL DISCUSSION-MARITIME PERSPECTIVE ON THE DEVELOPMENT OF THE REGIONAL MARITIME RESILIENCE FRAMEWORK AND UNIQUE CAPABILITIES & ASSETS AVAILABLE FOR RESPONSE & RECOVERY

- Moderator: Matt Morrison, Executive Director, Pacific NW Economic Region
- Mark Curtis, Director of Emergency Preparedness, Crowley Shipping
- Frank Immel, Business Development Account Exec., Global Diving & Salvage
- Seth Storset, Director of Safety, TOTE Maritime
- Ed Madura, Security Director, Port of Everett
- Ana Fuschetto, Fleet/Facility Security Officer, Washington State Ferries

1:15-1:30PM NETWORKING BREAK

1:30-2:15PM

NEXT STEPS FOR DEVELOPMENT OF THE MARITIME RESILIENCE FRAMEWORK

Brief overview of the Framework outline and timeline for Phase II of the project by Moffatt & Nichol, followed by tabletop discussion.

Table Discussion Questions: What do you want to see in the Maritime framework? How should it reflect the needs and capabilities of the private maritime sector? How can we increase the resilience of the region by utilizing the maritime sector? How can emergency managers continue to engage with your organizations specifically and with the maritime sector generally?

2:15-2:55PM

PANEL DISCUSSION: COMMUNICATIONS & INFORMATION-SHARING

- Moderator: Jeannie Beckett, Principal, The Beckett Group
- Mark Glenn, CIO, IT Director, WA EMD
- Scott Honaker, Communications Coordinator, Snohomish County
- Capt. Dan Smiley, Response Manager, WA State Maritime Cooperative
- Patrick Gallagher, Executive Director, Marine Exchange of Puget Sound

Table Discussion:

- What are the most critical gaps or weaknesses in existing communication and information-sharing protocols, strategies, plans and agreements that need to be resolved in order to expedite the recovery of some limited maritime transportation after an emergency?
- How do you communicate with volunteers, particularly self-mobilizers? Who should help organize and coordinate? What are possible models of success?
- What information sharing and communications systems should be used?

2:55PM

CLOSING COMMENTS

3:00PM

ADJOURN

PUGET SOUND REGION MARITIME DISASTER RESILIENCE WORKSHOP SPEAKER BIOS

May 24, 2022 | 9:00 AM - 3:00 PM

Speakers (In order of appearance)



BRENDAN MCCLUSKEY
DIRECTOR
KING COUNTY OFFICE OF EMERGENCY MANAGEMENT

Brendan McCluskey is the Director of Emergency Management for King County. King County Emergency Management is responsible for regional emergency preparedness and operations, including mitigation, response, and recovery, and a variety of homeland security matters. McCluskey is the County Executive's representative to the King County Emergency Management Advisory Committee, a designee to the State Emergency Management Advisory Group, and a core member of the Seattle UASI. King County Emergency Management was accredited by the Emergency Management Accreditation Program (EMAP) in 2017.

McCluskey completed Juris Doctor (law), Master of Public Administration, and Bachelor of Arts (biology) degrees. Brendan is a graduate (1st Cohort) of the National Emergency Management Executive Academy. He is a Certified Emergency Manager® and Certified Business Continuity Professional. He was an assistant professor at the UMDNJ (now Rutgers) Graduate School of Biomedical Sciences (2002-2014) and Kean University (2001-2009), teaching undergraduate and graduate courses in bioterrorism, weapons of mass destruction, public health, homeland security, and leadership; he has mentored a number of graduate and post-graduate students.



DICK MARZANO
COMMISSIONER
PORT OF TACOMA

Dick Marzano is a Tacoma native and long-term Pierce County resident. Marzano worked as a Tacoma longshore worker for more than 52 years and served a six-year term as president of the International Longshore and Warehouse Union Local 23. Marzano serves on the executive committees of the Puget Sound Regional Council and the Puget Sound Gateway Program. He is a former member of the Freight Mobility Strategic Investment Board and previously served as president of the Washington Public Port Association. Marzano is a member of the Tacoma Propeller Club, the Transportation Club of Tacoma, and a former board member of the Foss Waterway Development Authority, the United Way and St. Leo's Hospitality Kitchen. During his time as port commissioner, Marzano has remained focused on job creation and growing Port operations in a sustainable and environmentally responsible manner.



King County
Emergency Management

SASHA RECTOR
REGIONAL CATASTROPHIC PROGRAM COORDINATOR
KING COUNTY EMERGENCY MANAGEMENT



BRANDON HARDENBROOK
CHIEF OPERATING OFFICER
PACIFIC NORTHWEST ECONOMIC REGION

Mr. Hardenbrook's duties include overseeing all PNWER staff and programs in coordination with PNWER's governing board, which includes legislative leadership of each state, province, and territory as well as governors and premiers, and private sector leaders. PNWER's 22 working groups include trade & economic development, energy, border issues, agriculture, invasive species, tourism, disaster resilience, transportation, water policy and others.



AMY LUCAS
COMMUNITY RESILIENCE PROGRAM MANAGER
SNOHOMISH COUNTY EMERGENCY MANAGEMENT

Amy Lucas is the Community Resilience Program Manager at Snohomish County Department of Emergency Management, heading the Hazard Mitigation Program, Regional Catastrophic Preparedness Grant Program, and the Public Education and Volunteer Management programs. Under the HMP program, she leads several projects including facilitating Community Wildfire Protection Plans, and jurisdictional preparedness coordination. Under the 2019 RCPGP Regional effort, she is working to assess where populations may become isolated after a catastrophic earthquake to find viable points of distribution for food and water, and where Critical Transportation networks may need to be re-routed. Amy specializes in GIS Analysis, and has experience in Land Use, Critical Areas, and Emergency Response mapping and analysis. With a background in Healthcare, Infrastructure, and Land Use planning, she is working with regional partners and agencies to build greater resiliency and emergency response capacities within Snohomish County and its cities.



ERIC HOLDEMAN
DIRECTOR
CENTER FOR REGIONAL DISASTER RESILIENCE

Eric Holdeman is the Director of the Center for Regional Disaster Resilience (CRDR), which is part of PNWER. His areas of expertise include building regional coalitions between agencies, governments, the private sector and non-profits. Building regional disaster resilience is key to what he does day-to-day. He has also authored numerous articles for professional journals and opinion pieces for local, regional and national newspapers. He is a Senior Fellow, columnist, contributing writer and blogger for Emergency Management Magazine. An experienced and accomplished public speaker, he is sought after to present at national and regional conferences. Eric has the U. S.'s most popular blog on the topic of emergency management at www.disaster-zone.com.



JASON BIERMANN
DIRECTOR OF EMERGENCY MANAGEMENT
SNOHOMISH COUNTY

On May 5, 2016, Snohomish County Executive Dave Somers appointed Jason M Biermann the Director of the Snohomish County (WA) Department of Emergency Management. Having worked in a variety of emergency management roles in Washington, Wyoming, and Texas, combined with his extensive military service, Jason brings nearly three decades of diverse leadership, management, and emergency management experience to the department. During his tenure with Snohomish County, Jason supported the response and recovery efforts to multiple disasters including the 2014 SR-530 (Oso) Flooding and Mudslides, the Okanogan Complex fire in 2015, and the first confirmed case of COVID-19 in the United States in January, 2020. In 2017 Snohomish County became one of the first jurisdictions in the United States to use its emergency management system to coordinate its response to the opioid pandemic, which earned national recognition. And in 2019, Snohomish County received one of eight national awards of FEMA's Regional Catastrophic Preparedness Grant Program to advance its innovative approach to siting community points of distribution. In April of 2018, Jason retired after nearly 29 years of military service having attained the rank of Command Sergeant Major.



LIS KLUTE
DIRECTOR OF EMERGENCY MANAGEMENT
KITSAP COUNTY

Lis is the Director Emergency Management at Kitsap County, WA where she oversees the Joint Emergency Management Program and Emergency Operations Center for the County and its cities. Born and raised in Washington; she holds a master's in civil engineering/disaster management from Coventry University in the UK.

Previously Ms. Klute was Regional Emergency Manager (REM) for Amtrak and National Emergency Management Accreditation Program (EMAP) Administrator. Ms. Klute is a Disaster Management & Public Warning Expert to the United Nations, and previous Chair of WGIII Warning and Information, UNESCO Intergovernmental Oceanographic Commission, Tsunami/Coastal Hazards Warning Program Eastern US & Caribbean. She is the author of international Search & Rescue Policy, Plans & Protocols, the Handbook of Guidelines for a Health EOC's, and manages cross-national public warning systems projects in Africa and the Caribbean.



JODY FERGUSON
DIRECTOR OF EMERGENCY MANAGEMENT
PIERCE COUNTY

Jody is the Director of Emergency Management for Pierce County Emergency Management, the second-largest county in Washington State and is the Sponsoring Agency Chief for Washington Task Force One (WATF1) – one of FEMA's 28 urban search and rescue teams.

She has enjoyed a 30+ year career focused on emergency management and public affairs and now leads a 56-person department that includes Emergency Management, Radio Communications, EMS, WATF1 and Fire Prevention Bureau. She led both Pierce and King Counties' successful EMAP accreditation efforts and was a charter member of the group that eventually developed standards and a certification process for state and federal urban search and rescue programs. Jody holds a master's degree in security studies from the Naval Postgraduate School and is a member of FEMA's National Advisory Council.



CURRY MAYER
DIRECTOR
CITY OF SEATTLE EMERGENCY MANAGEMENT DEPT.

Curry Mayer is an emergency management and homeland security professional with over 25 years of experience in California and Washington, D.C. (17 years at the Governor's Office of Emergency Services in a variety of positions) and now in the great state of Washington. Response experience at the State Operations Center (SOC), the Regional Emergency Operations Center, and at the local government level, as the Planning Chief, and EOC Director. Managed & directed development and implementation of comprehensive emergency management programs for the private sector and all levels of government. Experience includes continuity of operations training & exercise programs. Author of state & federal level emergency management curriculum, scenario development & exercise design. Board Chair for the HSEM Degree program & for Washington's 211 - Information Network. Member of the Emergency Management Advisory Committee to the King County Council.



XOCHITL CASTAÑEDA
CHIEF
EMERGENCY MANAGEMENT DEPARTMENT,
UCSG SECTOR PUGET SOUND

CDR Castañeda reported to Sector Puget Sound in summer 2019 in the role of Chief of Emergency Management. She manages the Intelligence Division and Reserves Program. CDR Castañeda is a Native of Pearblossom, CA. She started her education at Antelope Valley College then transferred to University of California at Santa Barbara where she earned a B.S. in Aquatic Biology. Later she earned a Master's in Transportation and Logistics, with a Maritime Engineering Concentration from American Military University. She is a former Quartermaster and attended Reserve Officer Candidate School in 2002. CDR Castañeda has served on CGC MIDGETT and CGC CONNIFER, Sector Los Angeles/Longbeach, MSU Portland Oregon, USCG Headquarters in the Vessel Response Program, Sector Houston-Galveston, and D13 in dpi. Her experience includes Facilities, Port State Control, Regional Exam Centers, Pollution Response, Waterways Management and Emergency Management. She currently serves as the Historian to Association of Naval Service Officers, a Hispanic Sea Service Organization and is an advisor to the Leadership and Diversity Council. She recently completed a year-long Leadership Development Program for Department of Homeland Security Leaders. CDR Castañeda is married to Aaron Brodniak of Everett, WA and they have two sons Tomas (19) and Joaquin (15), a Siamese mix cat (Epiphany) and a lab shepherd mix dog (Colby). She enjoys spending time with extended family and friends, takes long walks with her sons and enjoys reading, cooking Mexican, Chinese, Indian, BBQ and Italian food (basically anything spicy) camping, and ICS.



ED MADURA
SECURITY DIRECTOR
PORT OF EVERETT

As Security Director, Ed Madura is responsible for the safety of the Port of Everett's Marine Terminals and Marinas. Prior to joining the Port, Madura spent many years on the water as a U.S. Merchant Marine Officer. He was also in the U.S. Coast Guard, trained in several emergency response functions such as Search and Rescue, first aid/CPR, and in-water survival.



MATT MORRISON
EXECUTIVE DIRECTOR
PACIFIC NORTHWEST ECONOMIC REGION

Matt Morrison serves as CEO of the Pacific NorthWest Economic Region (PNWER) which was established in 1991 by statute in the states of Alaska, Washington, Idaho, Montana, and Oregon, and the western Canadian provinces of British Columbia, Alberta, Saskatchewan, the Yukon and Northwest Territory. Mr. Morrison also manages PNWER's Center for Regional Disaster Resilience (CRDR). As CEO of PNWER, Mr. Morrison's responsibilities include coordinating all PNWER projects and reporting to the governing board, which consists of legislative leadership of each state, province, and territory, governors and premiers, and private sector leaders. The mandate of PNWER is to build the region's economy while enhancing the region's natural environment. PNWER's 15 working groups focus on trade and border issues, economic development, agriculture, energy and environment, invasive species, tourism, transportation, and workforce, among several others. Mr. Morrison is a leader in promoting innovation in the Canada-U.S. border region and has been instrumental in several successful pilots of the Beyond the Border and Perimeter Security Action Plan.



MARK CURTIS
DIRECTOR OF EMERGENCY PREPAREDNESS
CROWLEY SHIPPING

Mark Curtis has served in diverse roles across the maritime sector and in 2000 earned a BS in Maritime Safety and Environmental Compliance from Massachusetts Maritime Academy. During his time at the Academy, he participated in a GLOBEC Study on a National Oceanic and Atmospheric Administration Vessel and worked in oil spill response, recovery, and training in Santa Barbara, California. He then moved on to Royal Caribbean Cruises, where he spent nine years at sea as a Vessel Environmental Officer & Engineering Compliance officer. After several other roles with Royal Caribbean, he joined Crowley Petroleum Services in 2018 as an Operations Integrity Manager. He now serves as the Director of Emergency Preparedness for Crowley.



SETH STORSET
DIRECTOR OF SAFETY
TOTE MARITIME

Seth Storset brings over 15 years of maritime experience and safety leadership. As Director of Safety, Seth is responsible for Safety, Health, and Environmental for TOTE Maritime Alaska. He oversees long-term strategy and implementation of key programs to ensure everyone at TOTE and our key partners put safety at the forefront of every decision and action. Prior to joining TOTE Maritime Alaska, Seth worked for stevedoring companies in the port of Tacoma and Seattle. In 2015, Seth transitioned to TOTE Maritime Alaska as the Tacoma Terminal Manager and later Sr. Operations Manager to oversee TOTE's safety, operational excellence, customer, and colleague experience. Seth was promoted to Director of Safety in 2018. Seth holds an undergraduate degree in Communications from the University of Washington (2006) and an Executive MBA from the University of Washington's Foster School of Business (2019). He completed an Aviation Safety Management Systems Course at the University of Southern California, Los Angeles, and achieved a Green Belt in Lean Six Sigma from Maersk.



FRANK IMMEL
BUSINESS DEVELOPMENT ACCOUNT EXECUTIVE
GLOBAL DIVING AND SALVAGE

Frank Immel, current role of Business Development Account Executive, has been with Global Diving & Salvage, Inc. since 2005. Prior positions at Global include Lead Estimator and Marketing Manager. Global has extensive experience in managing large scale salvage projects related to hurricanes in the Gulf of Mexico and Florida as well as challenging salvage efforts off the coast of California and Alaska. We have decades of experience in managing every aspect of response operations, while also ensuring efficiency and safety throughout complex projects.



ANA FUSCHETTO
FLEET/FACILITY SECURITY OFFICER
WASHINGTON STATE FERRIES

Ana Fuschetto is currently a Fleet and Facility Security Officer at the Washington State Ferries, where she oversees the implementation of the security plan, coordinates drills and exercises, leads incident responses, and conducts employee security training. In addition to her primary security job functions, she also supports WSF's Emergency Management system through exercises, coordination, and training. Prior to that, Ana was an active duty Coast Guard Officer with over a decade committed to Marine Safety conducting commercial vessel inspections for regulatory compliance in Seattle, Houston, and on over 700 miles of the Mississippi and Missouri Rivers. Ana currently serves as a Coast Guard reservist focused on Emergency Management and Force Readiness at Sector Puget Sound. She is a graduate of the U.S. Merchant Marine Academy, holds an Unlimited Tonnage Mariner's License, and a Master of Arts in Disaster and Emergency Management.



DAVID CRUZ
ALL HAZARDS TECHNICAL LEAD
MOFFATT & NICHOL

David Cruz has more than 40 years of experience as a planner for port-wide studies and maritime facility projects. He has specialized in project management and civil design for port security projects and all hazards' studies. Mr. Cruz is ANSI/ASME certified in Risk Analysis and Management for Critical Asset Protection (RAMCAP). He has international experience including conducting port and rail facilities' assessments in Peru, Chile, South Africa, and Myanmar. Projects he has worked on include: Puget Sound Regional, All Hazards Risk Management/Mitigation Plan, Trade Resumption/Resiliency Plan, and Area Maritime Security (AMS) Assessment, Puget Sound, WA; Port of Tacoma Tideflats Facility All Hazards Assessment; and Area Maritime Security Committee Port-Wide All Hazards Management Plan, Los Angeles and Long Beach, CA.



JEANNIE BECKETT
PRINCIPAL
THE BECKETT GROUP

Jeannie's 40 years of expertise in provides her clients with "boots on the ground" knowledge of business continuity, emergency management and the logistics of inland transportation. Ms. Beckett works with agencies and associations to leverage their resources and build economic vitality for their regions. Before starting The Beckett Group in 2009, She had a 25 year career with the Port of Tacoma in leadership positions including Senior Director, Inland Transportation, and Director of Operations. Jeannie has worked on projects that profile the logistics and freight delivery needs, business resiliency and recovery as well as infrastructure resiliency efforts. These projects pinpointed areas of inefficiency in the highway and rail freight delivery systems and the lack of business / infrastructure continuity planning.



MARK GLENN
CIO, IT DIRECTOR
WASHINGTON STATE EMERGENCY MANAGEMENT



SCOTT HONAKER
COMMUNICATIONS COORDINATOR
SNOHOMISH COUNTY



CAPT. DAN SMILEY
RESPONSE MANAGER
WASHINGTON STATE MARINE COOPERATIVE

Dan Smiley is a master mariner turned emergency manager, educator, and podcast host. He started his career in the U.S. Coast Guard in 1983, followed by ten years of sailing in the Alaska coastal freight trade. In 1997 Dan joined Clean Sound Cooperative as Captain of the Oil Spill Recovery Vessel WESTERN GULL. As a response manager for Marine Spill Response Cooperative, Dan participated in numerous responses, including New Carissa, Cosco Busan, and Deepwater Horizon. Dan is an expert at exercise design and facilitation. He has been the lead designer of worst-case tabletop exercises in the United States, Canada, Brazil, the United Kingdom, and the Netherlands. Dan currently splits his time between the Washington State Maritime Cooperative and Gallagher Marine Systems.



PATRICK GALLAGHER
EXECUTIVE DIRECTOR
MARINE EXCHANGE OF PUGET SOUND