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M/V SALVAGE CHIEF

Critical Response & Recovery Capability for the Columbia River

Introduction

The Salvage Chief provides a unique and powerful disaster response and recovery capability not available anywhere else in the world.

Unique Response & Recovery Capabilities	
Emergency Operations Center	Infirmary Afloat
Six 100 Ton Winches	Potable Water Production
Power Generation	Emergency Communications
Helipad	Response & Recovery Logistics

The Columbia River is a National Strategic Waterway. The Salvage Chief has the critical capabilities required to provide response and recovery operations to remove downed bridges and other obstructions from the critical Columbia River waterway. She also has a helipad, emergency power, potable water production, logistics, infirmary afloat, Emergency Operations Center, and secure communications capability. There is no other capability of this type on the Columbia River.

The Chief will primarily serve communities in Oregon and Washington along the Columbia River and the regional Pacific Coast. The Salvage Chief will be strategically moored in Astoria, Oregon in order to provide immediate response capability to open a navigable channel inland to Portland and beyond after the impending Cascadia Subduction Zone earthquake.

As early as 1980, the Salvage Chief was recognized for her unique capabilities. In "Defense Utility of Commercial Vessels and Craft" published in July 1980, the Marine Safety Board notes, "The only active U.S.-flag, privately owned salvage vessel in operation today is a converted LSM (Landing Ship, Medium), SALVAGE CHIEF, of the Fred Devine Diving and Salvage Company on the U.S. West Coast."

The Salvage Chief remains a significant asset for marine salvage, logistics, communications, and training, and will be indispensable for post Cascadia response and recovery.

Objectives

Secure **$2.1 million** in funding for remaining capability updates necessary to **Ready The Chief and funding to maintain operations and program management for a minimum of two years**.

Capability Enhancements	Cost
Hull Repairs	$1,200,000
Engine & Fire Fighting Upgrades	$400,000
Operations and Program Management 2 Years	$200,000
Communications & USCG Contingency	$300,000
Total	**$2,100,000**

After funding is secured and updates are made, we will finalize agreements with agencies, departments, and organizations for the Chief to conduct training, exercises, and disaster response and recovery operations in compliance with all applicable county, state, and federal laws.

Background

The Salvage Chief has unique capabilities not available on any current vessel afloat. She was originally commissioned as the USS LSM-380 (Landing Ship, Medium) built for the U.S. Navy during WWII. She was designed to carry five medium tanks, or three heavy tanks, or up to nine DUKWs. After the war, the USS LMS-380 was decommissioned and purchased by Fred Devine Diving & Salvage Co., an expert salvage dive company in Portland, Oregon, who christened her The Salvage Chief. She was repurposed for shallow-water salvage and recovery operations. Mr. Devine transformed the Salvage Chief into a unique, world-class salvage vessel. The Chief is currently in use conducting training operations with the U.S. Army Special Operations Command (SOCOM) through the Department of Defense, Job Corps, and the local community college. These training operations sustain the Chief's operations in the absence of disaster response missions.

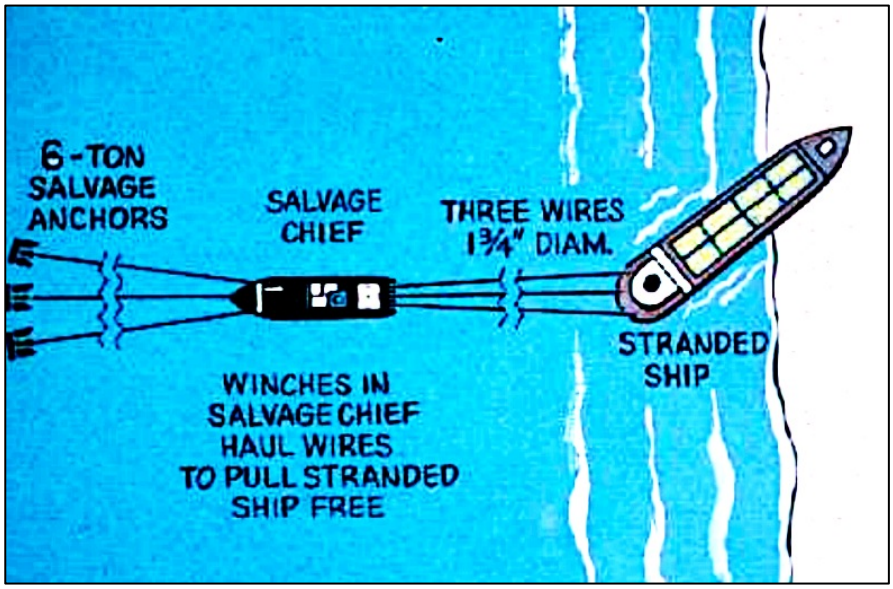
Post War Operations

The Salvage Chief conducted over 300 salvage operations during its time in private service after the war, and is estimated to have saved 95% of the shipwrecks and ships run aground on the West Coast during its operations, including response and recovery of the Exxon Valdez disaster. These monumental rescue and salvage operations could have only been conducted by the Salvage Chief; **even today there is no other ship that offers this unique suite of capabilities.**

The Chief has six Almond Johnson 200,000 pound winches: three on the bow, and three on the stern. Allen C. Bradley SCR (silicon controlled rectifier) units provide

220 Volt DC Power to the winches, or can provide power to vessels requiring emergency DC power. The Salvage Chief has one 25-ton electric operated boom with a maximum boom length of 50 feet, and two 18-ton hydraulic cranes. These cranes have been used in the past to successfully recover derailed railroad engines and cars from the Columbia River. The Chief's shallow draft and heavy crane capability make her uniquely suited to recover near-shore derailments along the waterway.

The illustration to the right shows how the Chief dislodges ships run aground.



Regulatory Authority and Piloting

The U.S. Army Corps of Engineers and the U.S. Department of Transportation Maritime Administration (MARAD) are the authorities responsible for maintaining the navigability of the Columbia River, and would be responsible for clearing any downed bridges following their collapse. Once funding is received to complete the

updates to the Chief's capabilities, we will enter into agreements with these and other regional authorities to ensure the ability of the Chief to serve in response and recovery operations in the event of a disaster.

Transportation of Supplies On Columbia River

The Columbia River is the second largest river in the U.S. by water volume behind the Mississippi River. The Salvage Chief's ability to drag, push, or otherwise clear obstacles from the Columbia and Willamette Rivers will be essential to reopening these waterways. Once navigable, the Salvage Chief can also transport essential supplies over these rivers.

The Salvage Chief has a shallow 4 to 9 foot draft, depending on embarked tonnage, which allows the Chief widespread access to waterways. The Chief also has 28 watertight compartments, which provide for exceptional safety and resilience when navigating obstructed waters. Modern ships are not designed with these types of compartments designed to mitigate damage from shell and torpedo.

The Salvage Chief can store and transport 80,000 gallons of diesel fuel, and has fuel polishers to maintain the diesel's quality and longevity. Therefore, the diesel aboard the Chief has a prolonged shelf life and higher quality. This may become one of the Salvage Chief's most valuable capabilities, as diesel fuel needed for generators, heavy equipment, and emergency response and transport vehicles will be in short supply following the Cascadia Subduction Zone (CSZ) earthquake.

Strategic, National, and International Impacts of Disruption to Columbia River Commerce

The United States is a Pacific nation, and the Columbia River provides critical access to the IndoPacific for trade. "In a trade-dependent state like ours, we rely on strong trading partnerships to help Oregon farmers feed the world and local businesses continue to grow," said Curtis Robinhold, executive director of the Port of Portland. "With small- or medium-sized businesses making up nearly 90 percent of all exporters in Oregon, it is promising to see trade activity expand—contributing to a more equitable and prosperous region for all."

According to the US Department of Agriculture, "The Port of Portland moved more than 6.7 million metric tons of agricultural export cargo in 2011. Approximately 96 percent of these cargoes were moved in bulk—84 percent of exports through Portland were grains, grain products, and soybeans." This trade supports food security across the IndoPacific region while contributing to a more positive balance of trade for the United States, open seaways and unimpeded trade envisioned by the 2017 US National Security Strategy (NSS).

As noted in the NSS, "Critical infrastructure keeps our food fresh, our houses warm, our trade flowing, and our citizens productive and safe." The Salvage Chief is a unique capability to restore navigation on the Columbia River, speeding disaster response and mitigating an economic catastrophe across the Asia Pacific region.

Resiliency of the Columbia River: Clearing Downed Bridges

"The Columbia River is a critical navigable waterway that transports goods to and from Portland and beyond. Over 8 million tons of commercial cargo traversed the Columbia River in 2017, with $15M in direct economic benefits to the region." *Columbia Snake River System Facts," Pacific Northwest Waterways Association*.[1]

The bridges traversing the Columbia River are ageing and likely to catastrophically fail during a Cascadia Subduction Zone earthquake. The resulting obstruction of the Columbia River waterway would severely hamper crucial supplies needed for response and recovery operations. Reopening the river quickly will save lives.

"A major Cascadia Subduction Zone seismic event is likely to alter Oregon's economy significantly, especially in the Portland metro area. A majority of state highways will be damaged and closed... Most of the bridges over the Willamette

[1] https://www.pnwa.net/factsheets/CSRS.pdf

and Columbia rivers will either have major damage or will have collapsed." *Oregon Highways Seismic Options Report March 2013, Page ii*.

The Salvage Chief is uniquely equipped with six Almon Johnson winches, three forward and three aft, capable of a straight-line tractive force of 300 tons to 500 tons. Because the ship was originally designed to run-aground, its hull is extremely thick and unmatched by the hull integrity of modern ships. This powerful hull in

concert with two OP 38 Fairbanks Morris engines will allow the Salvage Chief to pull, push, run-over, or tamp-down obstacles and fallen bridges in the Columbia River that will halt transportation following a Cascadia Subduction Zone Earthquake.

"Access to disaster areas may depend upon the re-establishment of ground and water routes… debris clearance and emergency road repairs will be given top priority to support immediate lifesaving response activities." *Oregon Emergency Operations Plan, ESF 3 Public Works, Page 3-3*.

"Roads, bridges and highways may become impassible following a significant seismic event." *State of Oregon Emergency Operations Plan Volume III, April 2017, Page IA 2-3*.

"While new bridges are built to be usable after the Big One hits, most of the state's bridges were built before geologists gained a full understanding of the threat of a Cascadia Subduction Zone earthquake. As a result, many bridges will fail if Oregon experiences a major seismic event." *ODOT 2019 Bridge Condition Report and Tunnel Data, Page 6*.

"[T]he Governor is directing the following: The Oregon Office of Emergency Management, in coordination with Oregon Department of Energy and Oregon Department of Environmental Quality, should commission a risk abatement study to

evaluate real-time options to mitigate product flow from the CEI [Critical Energy Infrastructure] Hub into the Columbia and Willamette Rivers immediately following a major earthquake. The study should include multiple scenarios based on expected earthquake size and liquefaction conditions at individual facilities. Following the study, the agencies should propose specific mitigation options, including rapid containment and recovery." *Resiliency 2025, by Mike Harryman, State of Oregon Resiliency Officer, Page 14*.

The Salvage Chief will play a critical role in mitigating and containing obstructions on the Columbia and Willamette Rivers. Reopening of those waterways will reestablish commodity flow into and out of the CEI (Critical Energy Infrastructure) Hub. The Salvage Chief will clear the way for other ships to provide medical supplies, disaster response equipment, and CEI repair parts to the greater Portland area as well as communities along the inland navigable waterways and regional coastal ports.

"The majority of bridges and other transportation infrastructure in western Oregon are susceptible to serious damage in a major seismic event, because they were built before modern seismic codes were in place." *The Oregon Resilience Plan – Transportation – February 2013, page 107.*

"Because most of Oregon's highways were constructed before design codes considered the potential Cascadia Subduction Zone effects, many bridges and unstable slopes are vulnerable to severe damage." *The Oregon Resilience Plan – Transportation – February 2013, page 108*. The Salvage Chief also has dredging capabilities that could mitigate damage from collapsed slopes.

Dredging

The Salvage Chief is equipped with a device for By Pass dredging that was patented. The device consists of a hydraulically operated propeller slipstream diverter that directs a vessel's propeller wash into the area to be dredged. Adjusting the angle of the diverter, engine power, and the rate of travel over the area to be dredged, which is controlled by the winches, controls the rate of dredging. The system can move approximately 3,500 cubic yards per hour in sand and silt. The system has been used successfully to bury ocean outfall pipes

through the surf and scouring-out stranded vessels in protected waters. The system can also be used to dredge harbor entrances to maintain channel depth. The device is capable of dredging to depths to 30’ below mean low water. Connection points have been permanently installed on the Chief to facilitate the installation of the diverter. The vessel has a permanent hydraulic system for the diverter system. The photograph below shows the beaver tail dredge and diverter system in dry dock.

This patented system has been installed on United States Army Corps of Engineers vessels to maintain small harbor entrances at various locations predominantly on the Oregon Coast. The photograph below is of the Salvage Chief dredging sand and silt from around a wrecked vessel on the Oregon Coast.

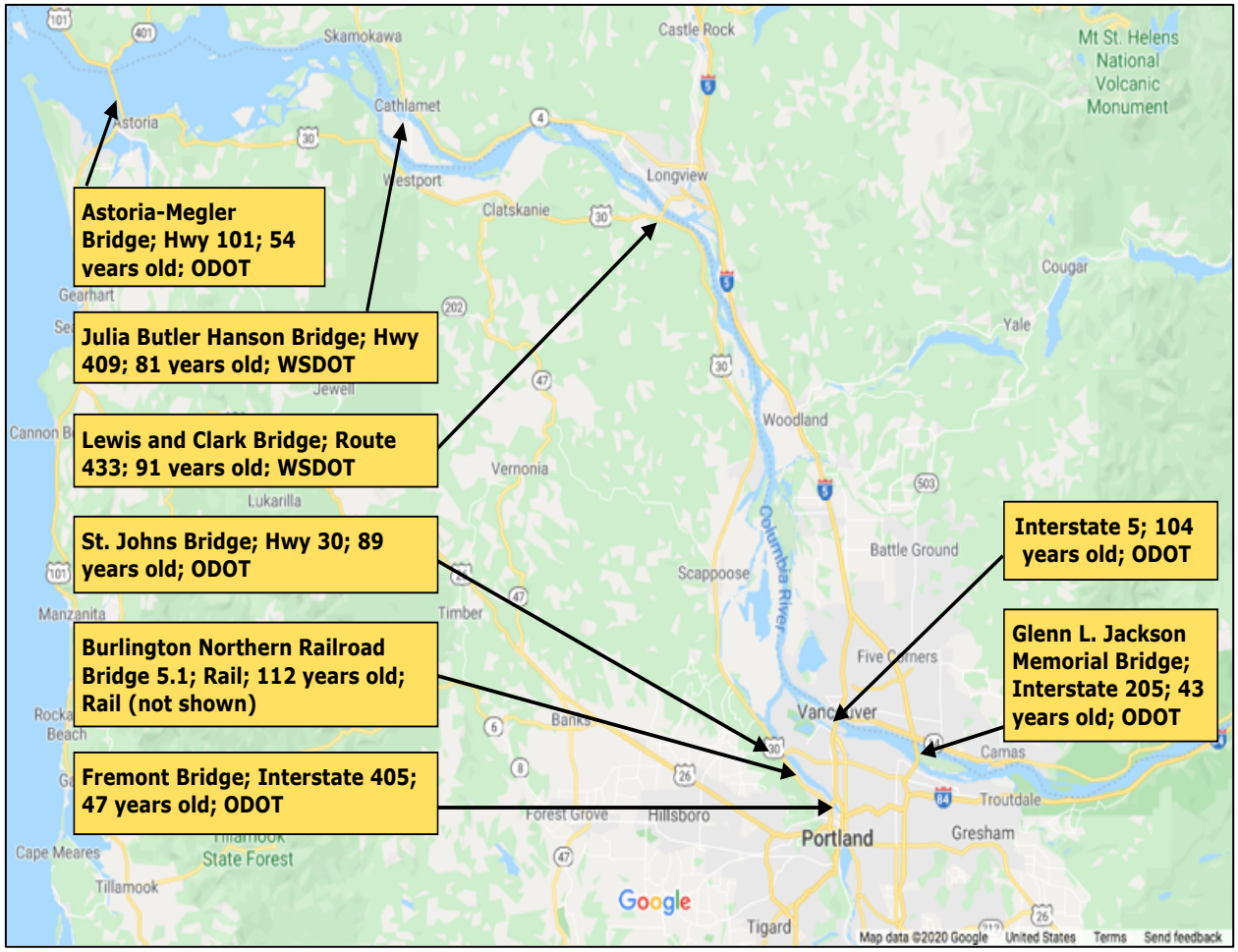
Bridges

"Critical factors affecting marine terminal viability include the condition of navigation channels immediately following a seismic event and how quickly and successfully resources can be deployed to assess and clear navigation channels of silt and structural obstructions. Additionally, structures that collapse into the navigation channel would need to be removed to allow ships to pass safely. Initially, shallow-draft barges may be the only viable option to move material and goods to and from marine terminals; or ship calls will be diverted to other, unaffected ports and regions." *The Oregon Resilience Plan –Transportation – February 2013,* page 132-133.

No other ship in the region will be able to respond to this need. The Salvage Chief is uniquely equipped to remove collapsed structures from the Willamette and Columbia. This is a force-multiplying factor: the Chief is the only vessel in the region that can accomplish this task, thereby allowing other supply and support vessels to conduct disaster response operations. However, if the Chief does not acquire the necessary funding, none of these operations will be possible.

The following maps illustrate the risk to commerce, response, and recovery activates over the Columbia and Willamette Rivers due to the waterway being obstructed by downed bridges and other debris. The following information includes the age of each bridge and the agency responsible for its maintenance:

Bridges from Astoria to Portland

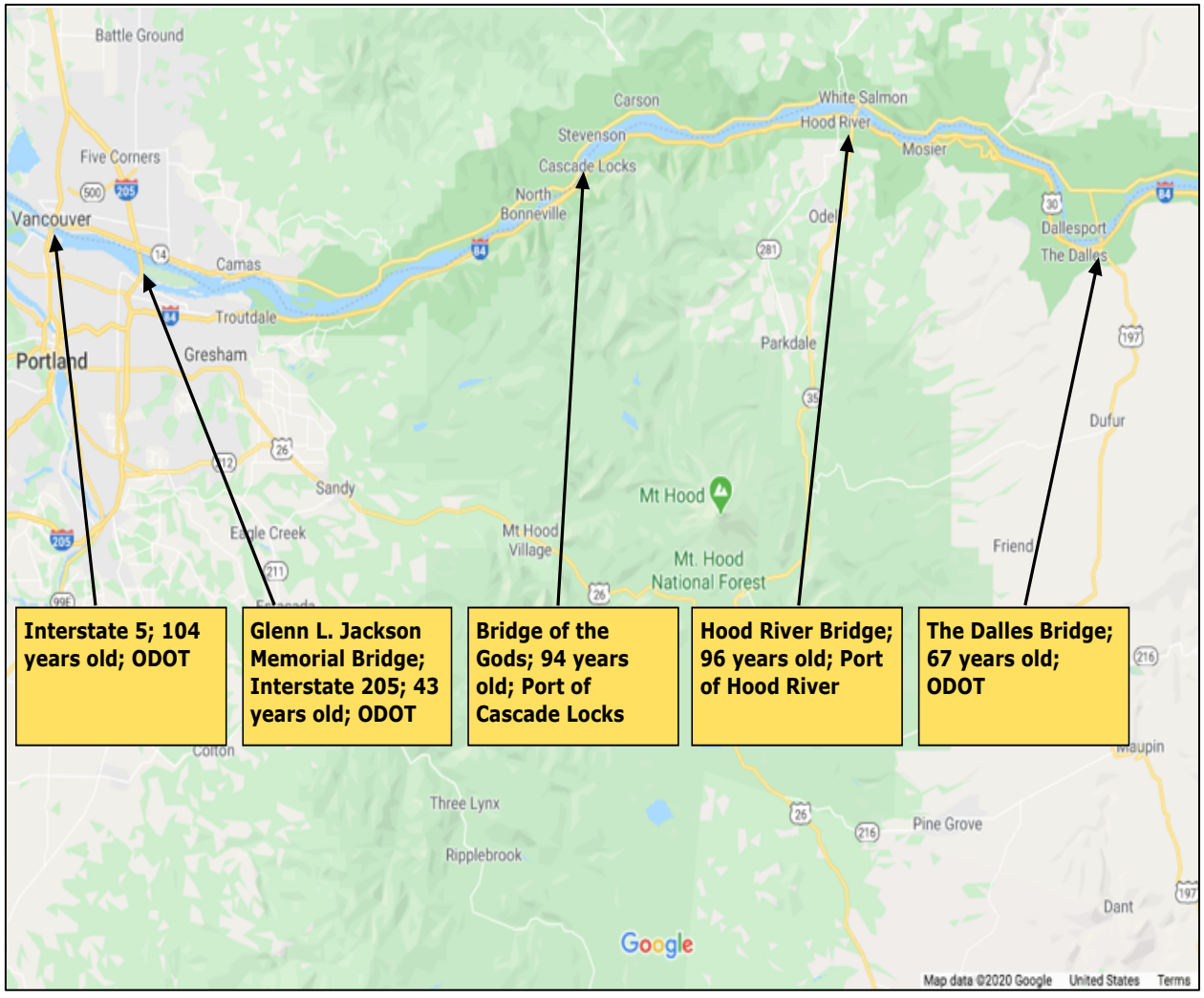


The map above shows the three bridges, Astoria-Megler, Julia Butler Hanson, and Lewis and Clark, which are between the Pacific Ocean and the fork at Kelly Point, which is the confluence of the Willamette River and the Columbia River. These are large, old bridges that would represent the first obstacles to be cleared following a major seismic event.

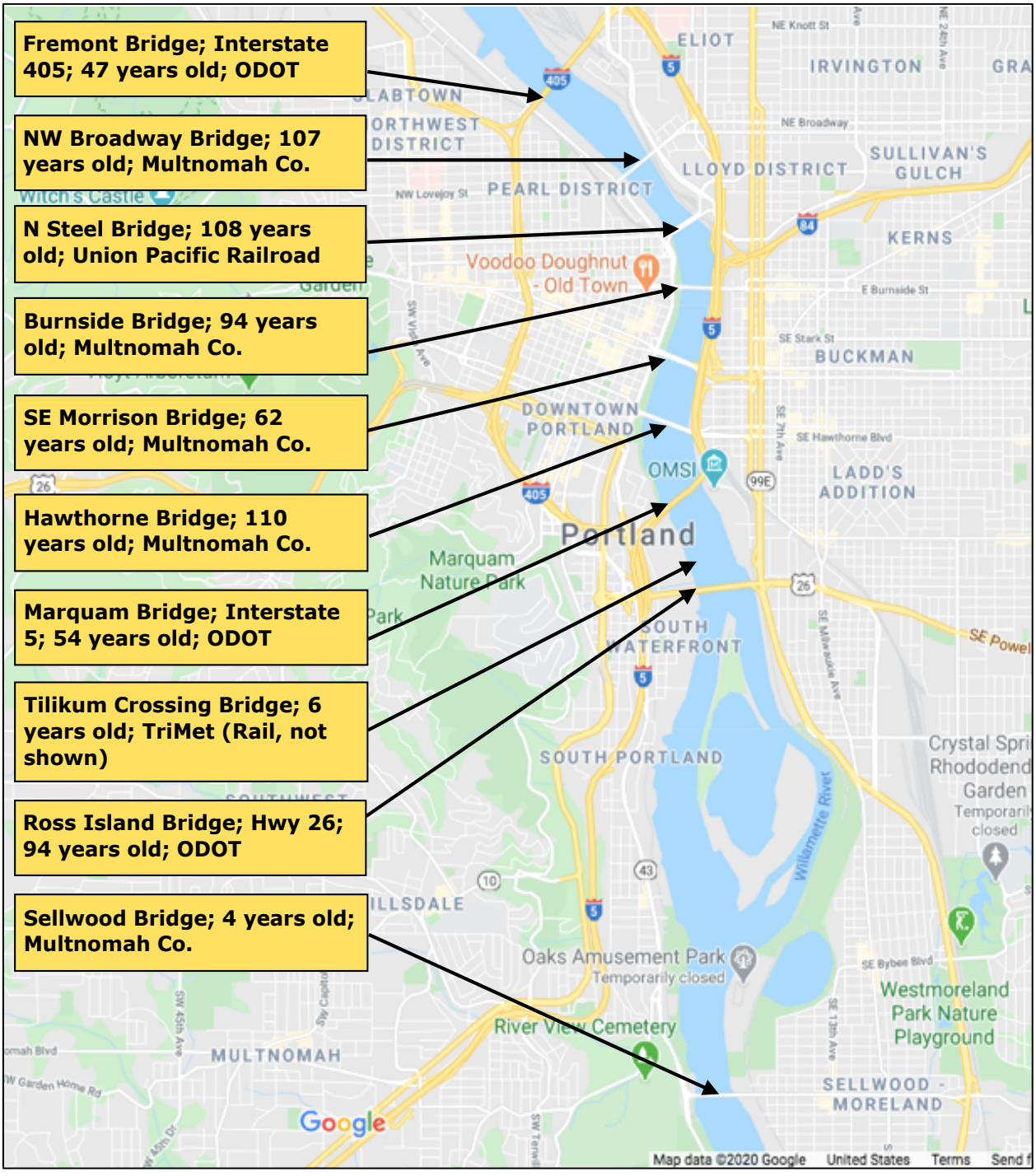
The Salvage Chief, with the required updates, would be the only ship in the vicinity capable of clearing this waterway. Passage of this waterway is a crucial element of the region's disaster response and recovery operations by allowing supplies and equipment to be delivered to areas impacted by the earthquake.

Many of Portland's historic buildings that comprise most of the city are constructed of unreinforced masonry. As a result, a large seismic event is expected to damage or destroy much of that infrastructure, including over-land surface street bridges, making transportation throughout the city unmanageable.

Bridges from Portland to The Dalles



Bridges on the Willamette in Portland



After clearing the navigable channels of the Columbia and Willamette Rivers, the Salvage Chief could serve to ferry commodities obtained from offshore vessels and barges to Portland and points east, as well as needed medical supplies and equipment to Saint Helens and Astoria, and coastal ports such as Tillamook,

Newport, Longview, and Aberdeen, WA. The Salvage Chief could also haul commodities upriver to small communities such as Wheeler that will be cut-off from terrestrial vehicle support in the weeks following a CSZ event.

Emergency Operations Center

In addition to employing the Salvage Chief's unique capabilities to clear the Columbia and Willamette Rivers of obstacles and to transport life-saving commodities, the Salvage Chief can also serve as fully capable deployable Emergency Operations Center (EOC). The Salvage Chief has a helicopter pad that can accommodate rotary wing aircraft as large as a Bell 212, which would allow the Salvage Chief to serve as an outstanding EOC either at dock, at anchor, or underway (A Bell 206 JetRanger is shown in the photo). The Salvage Chief has crew birthing for 25 plus officers' quarters for six. Moreover, only eight crew are required to operate the ship, which allows for over 20 EOC personnel to remain onboard to conduct and coordinate disaster response operations.

Hospital Support and Infirmary Capability

Columbia County Oregon does not have a hospital. The Salvage Chief can serve to fill that gap. Just as the U.S. Navy deployed hospital ships to New York Harbor during the Covid-19 Pandemic, the Salvage Chief will be able to provide timely, critical infirmary service to communities adjacent to the Columbia and Willamette Rivers as well as communities on the Pacific Coast. The capability is mission critical to save lives in the immediate aftermath of a major earthquake.

The Salvage Chief could support hospitals and urgent care centers ashore by providing power and fresh water where critical infrastructure has been disrupted. Additionally, with extensive infrastructure deferred maintenance, nearby bunkers on Tongue Point (formerly Navy district 13) could be upgraded to serve as a regional disaster response and recovery field hospital or infirmary. The Salvage Chief could immediately support that facility with power, water, supplied and transportation via the heli-deck. The Chief could also support other, larger ships and barges that could be converted into hospitals afloat. The Chief could also provide infirmary services to injured people who are able to ambulate the Chief's decks. It is also possible to outfit the Chief with portable cargo containers or tents

that serve as triage centers or emergency facilities such as the military uses at Forward Operating Bases. The cost of these potential triage containers or tents is not included in the estimated costs listed in this brief.

"[Oregon's] ESF 8 is based on the following planning assumptions: Hospitals, nursing homes, ambulatory care centers, pharmacies, and other facilities for medical/health care and access and functional needs populations may be damaged or destroyed in major emergency situations… If hospitals and nursing homes are damaged, it may be necessary to relocate significant numbers of patients to other comparable facilities elsewhere." *Oregon Emergency Operations Plan, ESF 8, page 8-3*.

The Salvage Chief can support medical facilities ashore or other medical support ships, or serve as an infirmary. With birthing for 25, and separate individual quarters for six more, the Chief can serve in an overflow capacity to local area hospitals, or provide infirmary services to communities without hospital service, like Columbia County.

"Hospitals provide not only the vital medical services a community needs on a daily basis but also serve as a critical element in post-disaster emergency services. Their importance to any community -- pre-disaster or post-disaster -- cannot be overstated." *State of Oregon Emergency Operations Plan, page IA 0-21*.

According to the Cascadia Playbook Working Draft 3.0, an objective of ESF 8, Health and Medical, is to, "Coordinate use of **non-traditional facilities** to treat disaster survivors in impacted areas. Non-traditional facilities in that context means any structure that can be turned into a triage units and recovery centers, such as public schools, fairgrounds, and other large still-standing facilities that can be repurposed (emphasis added)." However, The Salvage Chief is a vessel designed for self-sufficiency with ship's doctor and facilities capable of treating lessor injuries. The Chief's capability as an infirmary is one of its most valuable contributions to landscape–wide disaster response operations in the Columbia River valley. The Chief is an ideal "non-traditional" medical facility whose value cannot be understated.

Auxiliary Power Generation

Imbedded within the Cascadia Playbook Working Draft 3.0, an objective of ESF 12, Energy, is to, "Support mass care operations' power generation status and needs," and to "Assess and provide power generation equipment and fuel to mass care operations." *Oregon Emergency Operations Plan, ESF* 8.

The Chief's five 250kw generators provide enough electricity to power the needs of a small town, such as Saint Helens, OR. Accompanying those generators are Stray-Current Detectors invented and installed by Fred Devine to ensure the safety of divers in the water during operations and power generation. Following a devastating disaster where critical infrastructure has been severely damaged or

destroyed, the Salvage Chief can serve as a mobile power plant to provide ship-to-shore power to critical infrastructure such as hospitals, fueling stations, water treatment plants, and power sub-stations. This critical capability will save lives, and warrants the investment to **Ready The Chief**.

Communications

The axillary power generation capabilities enable the Salvage Chief to become a mobile communications facility. The priority of ESF 8, Comms, is to, "Establish and maintain voice and data capability of all mass care operations," and to, "Establish positive contact with each of the 36 counties and 9 tribes." *Oregon Emergency Operations Plan, ESF 8*. In a disaster response, the Salvage Chief will enable emergency management and local authorities to accomplish critical, life-saving communications to establish needs, capabilities, and exchange of resources. The Chief is currently equipped with:

- Two SEA SSB Radios all channel
- Electro International auto distress watch
- Two ICOM VHF Radios
- Drake all frequency receiver
- Cobra CBAM/FM, DMDG
- Six portable Motorola VHF radios
- Cell Phone Service
- HAM, HF, WKGY
- SCIF (Sensitive Compartmented Information Facility)

Comms updates are included in the funding request to equip the Salvage Chief with state-of-the-art voice and data communications equipment. That equipment will be critical to coordinate activity with our federal and State partners during a major disaster.

Potable Water Production

Oregon's ESF 11 is based on the following planning assumptions: The need for fresh food and water will likely overwhelm a community's local supply if electricity is not available for three (3) or more days. *Oregon Emergency Operations Plan ESF 11 Food and Water*. The Chief has been equipped with a new UV treatment water purification system that can produce 3,500 gallons of potable water from fresh or salt water each day. However, the amount of water production available from brackish is unknown and untested. Additionally, the UV treatment would not filter-out heavy metals from the water, but the filtration system should provide some protection. This capability can supplement the water needs of a community with a compromised drinking water system.

Machine Shop

The Salvage Chief has a complete machine shop in which it fabricates repair parts for its engines, equipment, and hull. This capability makes the Salvage Chief

extremely self-sufficient, and would enable the Salvage Chief to assist local authorities, public works, and utilities to manufacture components needed to restore critical infrastructure. Equipment includes three on board machine and welding shops, an inventory of necessary salvage equipment, tools, welding and cutting equipment and patching material.

Summary

The capability of the Salvage Chief to save lives and mitigate damages in a disaster response operation is unsurpassed by any ship currently available afloat for the response and recovery. The unique ability to clear navigable waterways will allow essential supplies to reach crippled communities quickly. The Chief's ability to serve as a mobile infirmary can be a game changer when transportation routes are impassable to many communities with little or no medical services. The Salvage Chief can provide supplement electrical power before utility repairs to the power grid are completed. The Chief can supply communities with potable water when water systems fail or become contaminated. The Chief can serve as a mobile Emergency Operations Center from which joint operations can be prioritized and directed. Quite simply, the citizens of the Columbia River Valley must have the Chief at the ready.

Although it is difficult to quantify, it is generally understood in emergency management that money spent on mitigating hazards provides a much higher return on investment than funds spent on response. For emergency managers looking for ways to reduce the impact of disasters, there is seldom an option that makes as much sense and this proposal. Several months into the COVID-19 response, we know how fragile our supply chains really are. Living without access to the sea through the Columbia River is for all intents and purposes unimaginable as it entails such tremendous human and economic costs.

According to the Oregon Highways Seismic Plus Report published by the Oregon Department of Transportation in 2014, improving our highway transportation infrastructure to the point it will survive a Cascadia Subduction Zone Earthquake will span decades and cost in excess of $5 billion USD. For a fraction of that cost, we can **READY THE CHIEF** and be prepared to quickly restore access from the Pacific Ocean to isolated Northwest communities using our abundant inland waterways. This is a smart investment. It is sustainable through the existing partnerships with the Job Corps and U.S. SOCOM. As it has throughout its storied history, this vessel continues to serve. With the right support, it will continue to serve into the future. **READY THE CHIEF**.

M/V SALVAGE CHIEF

Critical Response & Recovery Capability for the Columbia River

READY THE CHIEF!

Appendix A

Salvage Chief Specifications

M/V SALVAGE CHIEF

Specifications

Principal Dimensions	
Length over All	202.6’
Breadth	34’
Depth	17.6’
DRAFT	7.5’
Gross Tonnage	490
Displacement	1175
Accommodation	27

Propulsion
Twin Screws, (2) 38D8 1/8 10 cylinder opposed piston Fairbanks Morse engines total 3600 H.P.
Designed By GIBBS & COX

Auxiliary Machinery
Five V8-92 Detroit driving five 250 KW 440 volt, three phase, 60 Hz, Newage Generators. (1 Megawatt)

Winching System
Six Almon Johnson winches, three forward and three aft, capable of a straight line tractive force of 300 tons which can be configured to 500 tons.

Allen C. Bradley SCR units to provide 220 volt DC Power to the Almond Johnson salvage winches or vessels requiring DC emergency power.

Cranes
One 25 ton electric operated boom
Two 18 ton hydraulic cranes maximum boom length 50 feet

Helicopter Pad	
Capacity	Up to Bell 212
Miltary Rotary Wing-Night Capable	

Repair and Patching Facilities
Three on board machine and welding shops, an inventory of necessary salvage equipment, tools, welding and cutting equipment and patching material. To accomplish many types of salvage operations. Dive Locker with Breathable Air On Board Field Trauma Facility with MD and PA

Navigational Equipment
Trimble NT Global Positioning System
Raytheon GPS with Nav pack
Furuno GPS and Overhorizon C
Sperry gyro compass
Decca auto pilot
Mathews Marine Systems auto pilot
Two Decca Radars 48 mile range
Raytheon fathometer with fore and aft transducer
Raytheon Weather fax
Furuno Nav Tex receiver
Simrad Taiyo VHF RDF
Rayteon recording fathometer, with floating transducer for us with helicopter

Communications
Two SEA SSB Radios all channel
Electro International auto distress watch
Two ICOM VHF Radios
Drake all frequency receiver
Cobra CB, AM/FM, DMDG
Six portable Motorola VHF radios
Cell Phone Service, HAM, HF, WKGY

Ground Tackle	
Anchors	
Three Eells	12,000 lbs/ea
Two Eells	8,000 lbs/ea
Two Danforth	3,000 lbs/ea

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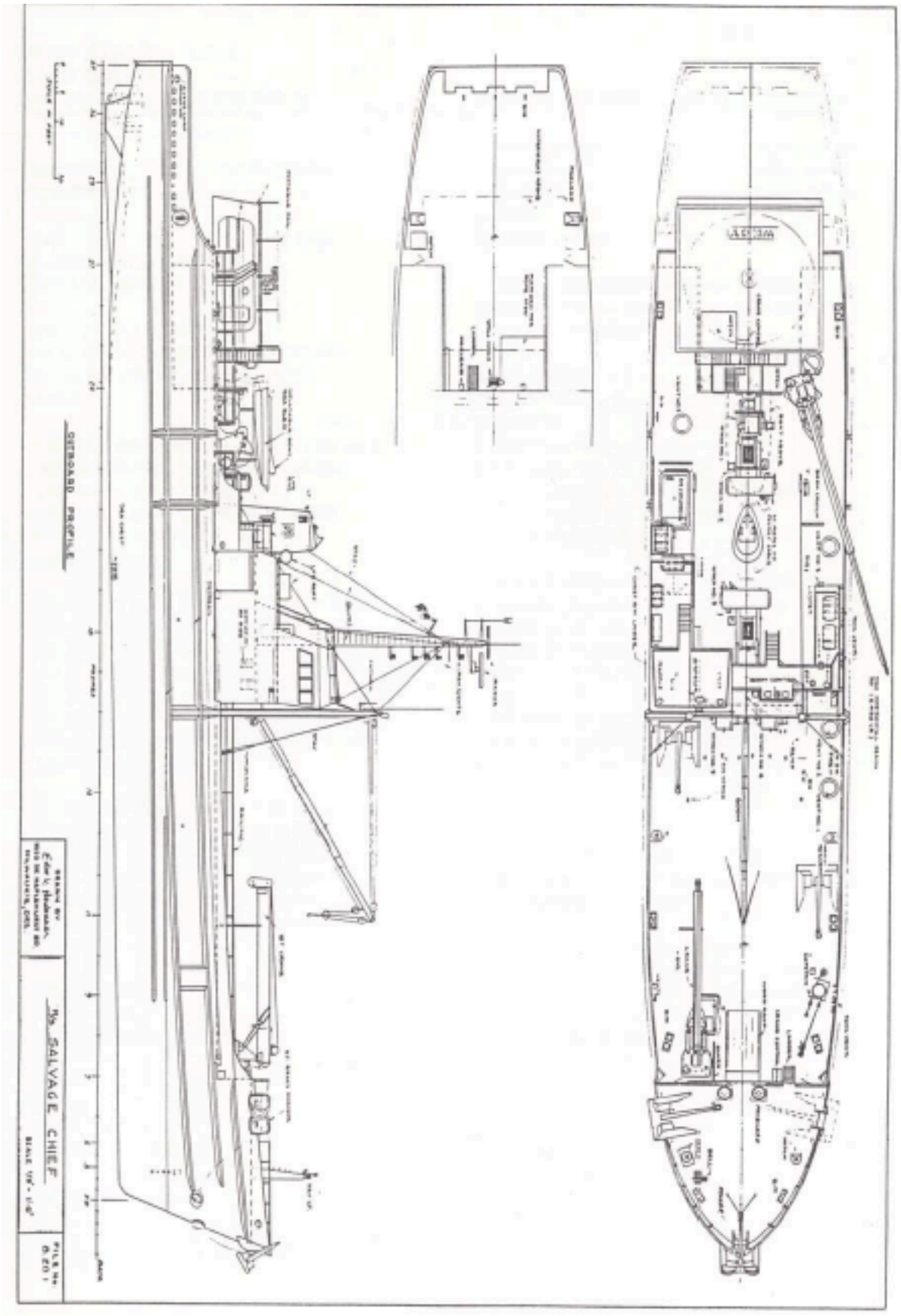

Appendix A3

Appendix B

2019 Oregon State Legislature
Senate Bill 678

Senate Bill 678

Sponsored by Senator BOQUIST (at the request of Salvage Chief Foundation)

SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure **as introduced.**

Appropriates moneys from General Fund to Oregon Department of Administrative Services for distribution to Salvage Chief (LSM380) Foundation for purpose of repairing and upgrading salvage vessel.

Declares emergency, effective July 1, 2019.

A BILL FOR AN ACT

Relating to state financial administration; and declaring an emergency.

Be It Enacted by the People of the State of Oregon:

SECTION 1. In addition to and not in lieu of any other appropriation, there is appropriated to the Oregon Department of Administrative Services, for the biennium beginning July 1, 2019, out of the General Fund, the amount of $1.9 million, to be distributed by grant to the Salvage Chief (LSM380) Foundation, an Oregon public benefit corporation, for the purpose of repairing, upgrading and returning to operation the vessel known as the Salvage Chief, as follows:

(1) $1.2 million for hull repairs;

(2) $400,000 for engine and fire pump upgrades; and

(3) $300,000 for emergency communications upgrades, United States Coast Guard inspection and contingency.

SECTION 2. This 2019 Act being necessary for the immediate preservation of the public peace, health and safety, an emergency is declared to exist, and this 2019 Act takes effect July 1, 2019.

NOTE: Matter in **boldfaced** type in an amended section is new; matter [*italic and bracketed*] is existing law to be omitted. New sections are in **boldfaced** type.

LC 3438

SB 678 STAFF MEASURE SUMMARY

Senate Committee On Veterans and Emergency Preparedness

Prepared By:	C. Ross, LPRO Analyst
Sub-Referral To:	Joint Committee On Ways and Means
Meeting Dates:	3/20, 3/27

WHAT THE MEASURE DOES:

Appropriates $1.9 million General Fund dollars to the Department of Administrative Services for distribution to return the vessel *Salvage Chief* to operation for emergency response and recovery purposes. Declares emergency, effective July 1, 2019.

ISSUES DISCUSSED:

- History of unique vessel
- Wide variety of capacities including: carry fuel; pump water; clear hazardous sunken debris in shipping lanes, waterways, shallow waters; refloat other vessels; land and transport a helicopter
- Capacity to clear submerged, collapsed bridges
- Critical location and value to region: up and down the West Coast, mouth of Columbia, and inland via the Columbia
- Value as an immediate regional asset especially within first weeks post disaster, before other responders arrive
- Value in context of speeding up *economic* recovery post disaster
- Investments already mad
- Current service as volunteer training vessel for Job Corps' Seamanship Program; approximately 7300 hours contributed to date
- Cost to procure equivalent capacities or services compared to investment in *Salvage Chief*
- Comparison to much older Portland fire boat *David Campbell*, built in 1927, still in active service

EFFECT OF AMENDMENT:

No amendment.

BACKGROUND:

The *Salvage Chief* was originally commissioned the *USS LSM-380*, one of 558 LSMs (landing crafts, medium) built for the U.S. Navy between 1944 and 1945, sized to carry five medium or three heavy tanks, or up to nine "Duck boats" (amphibious vehicles or DUKWs). She was manned by six officers and 54 crew and assigned to the Asia-Pacific theater, where LSMs proved critical to the Allies' success. Six months after assignment, on August 15, 1945, Japan surrendered and the *USS LSM-380* carried Marines to China to manage the repatriation of thousands to Japan. She then sailed to Guam, Pearl Harbor, and back across the Pacific to join the mothball fleet at Suisan Bay near San Francisco, destined for scrap. In 1948, she was decommissioned and purchased by Fred Devine, a visionary entrepreneur and salvage expert based out of Portland, who transformed and repurposed the ship for shallow-water salvage and recovery work, by scavenging and installing 60-ton pull anchor winches both fore and aft, and building an aft helicoptor pad, among other unique modifications. The ship then operated out of Astoria

Appendix B3

starting in 1949 and became renowned for its rescue and recovery work over the next fifty years, particularly with large ships in dire situations, including refloating the grounded 10,000-ton Liberty ship *Yorkmar*, the Greek freighter *Captyannis*, the 810-foot Liberian oil tanker *Sansinena*, the crippled *Exxon Valdez*, as well as barges, dredges, cruise ships, a Japanese troop ship, a U.S. Coast Guard cutter, and more. *Salvage Chief* is now owned by Salvage Chief, LLC, whose partners are attempting to transform it once more into a local asset for training and disaster response purposes. ("Salute to M/V *Salvage Chief* (ex-*LSM 380*)" by Jim Mockford, *Sea History 162, Spring 2018*, at https://seahistory.org/wp-content/uploads/SH162-SalvChief.pdf, accessed March 2019.)

The *Salvage Chief* has a remarkable history - it is already of notable historical, cultural and educational interest - but the longevity of its practical utility at the age of 75 is a credit to those who built it; to the community of Astoria where it is homed; to the extraordinary individuals who captained and crewed it and who partnered alongside every rescue and recovery operation; and particularly to those who originally conceived of and accomplished its unique transformation from military to commercial and public uses.

Senate Bill 678 appropriates $1.9 million General Fund dollars to the Department of Administrative Services for distribution to the Salvage Chief Foundation - specifically $1.2 million for hull repairs; $400,000 for engine and fire pump upgrades; and $300,000 to upgrade emergency communications and provide for U.S. Coast Guard inspection and contingency - to return the vessel *Salvage Chief* to operation for training and disaster response and recovery purposes.

Appendix C

2019 Oregon State Legislature
Senate Bill 678
Supporting Testimony

COLUMBIA COUNTY
Emergency Management

ST. HELENS, OR 97051
230 Strand St.
Direct (503) 366–3931
www.co.columbia.or.us

Date: 15 March 2019 To: Oregon Senate

From: Steve Pegram

Subj: Letter of Support: SB678 Repairs and upgrades to **M/V Salvage Chief**

Columbia County Office of Emergency Management is an enthusiastic supporter of funding the repairs and upgrades required to return the M/V Salvage Chief to operations. The capability provided by this unique vessel for river, ashore, and near coastal response and recovery operations is unique and cannot be duplicated by any other vessel extant in our waters.

Specifically, the M/V Salvage Chief provides the following mission critical functions:

- Flexible support for marine response and recovery from Astoria OR to Lewiston ID.
- Uniquely suited to its concurrent mission of training future mariners and marine responders.
- Highly capable mobile Emergency Operations Center including a helo-pad and a significant communications suite.
- Afloat regional trauma center capable. This is particularly critical in Columbia County since we do not have a hospital.
- Shallow draft (7′ 9″) allows significant flexibility when responding to shore side incidents.
- Five 250 kW generators capable of providing significant emergency power both to vessels afloat and shore side installations such as the riverside Columbia County and City of Saint Helens courthouses.
- Response to a riverside rail incident. The rail line parallels the river for much of its length. The M/V Salvage Chief has been used successfully in the past to recovery derailed engines and cars from the river. The shallow draft and heavy crane capability make the M/V Salvage Chief unique in this respect.
- Ability to move downed bridges during a Cascadia Subduction Zone event to speed the opening of the Columbia River to both response and recovery traffic as well as economically critical commercial traffic.

This capability cannot be otherwise duplicated in any reasonable timeframe due to the significant lead times to launch a vessel of this type. Designing and building a vessel with similar capability will cost many millions of dollars more than the upgrades requested to **Ready the Chief**. I encourage your support for this critically needed response and recovery capability along the Columbia River.

Semper Paratus,

Steve Pegram

Steve Pegram
Director
Columbia County Office of Emergency Management
steve.pegram@co.columbia.or.us
503.366.3934

Appendix C2

Senate Committee on Veterans and Emergency Preparedness
SB 678
Salvage Chief (USS LSM 380, WWII) Request

Lorraine Churchill
Oregon Resident
Cowlitz County WA Department of Emergency Management

Senate President Peter Courtney, Senator Alan Olsen, Senator Brian Boquist and Senator Laurie Monnes Anderson-

I've been fortunate to serve Emergency Management roles here in the Pacific Northwest, in Australia, Colombia and New Zealand. There are themes common to each society I've experienced.

As honorable members of this essential committee you serve, I believe you each are already well familiar with the looming, abstract idea we now understand and call the Cascadia Subduction Zone Earthquake. There is no way to make the unfathomable, real, tactile, to those we serve, our public whom thank God, have not experienced a plus 9 magnitude earthquake, yet.

But we have experienced previous unimaginables in the Pacific Northwest- the eruption of our Mount Saint Helens. The recent Manzanita tornado. 500 year floods striking Vernonia and other communities back to back. Not that we logically know such things can't happen, we just don't believe they will happen here, to us, in our 'now' despite the evidence.

This is the common thread binding each culture I've experienced: whether we imagine it won't happen in our lifetime, whether we feel too overwhelmed to handle another worry, or whether we think it's someone else's job to worry and plan- there exists this general theme the bad thing won't happen.

What do we do about it?

Innovation is an Oregon value, something we excel in; seeking new answers to ongoing challenges- just look at the Bottle Bill. Recycling, repurposing our resources to serve a new need instead of throwing a "used up" container aside.

Your committee is aptly and interestingly named: the Senate Committee on Veterans and Emergency Preparedness. This is not an accidental pairing. To my mind, and I'm certain to others, it's a perfect union. A veteran is someone whom served our Nation's military. Trained. Skilled. Purposed. Often giving far more than should ever be asked. Upon separation, we re-label that talent, that purposeful soul, a veteran.

This conversation today is about re-labeling another veteran. Putting her WWII soul to good, honorable purpose. The Salvage Chief, is simply a rather unique veteran. But Oregon is thankfully accustomed, skilled to innovate the unique.

The Salvage Chief provides a unique platform- she has the capacity to provide power, water, river debris clearing. Keenly, she has the capacity to serve our communities as an Emergency Operations Center, coordinating response and recovery communications up and down the Columbia River.

Our worst case scenario is yes, the expected Cascadia Subduction Earthquake. Columbia County OR, Cowlitz County WA, and those more rural counties westward to the ocean understand we will not be first on the response list. We are not the epicenters of population.

Our bridges westward are forecasted to fail. Our roads are expected to fail. Rail. All impacted and impassable. The one highway which will still be readily viable, will be the one highway key in the very settlement of our Oregon: the Columbia River Maritime Highway.

With her shallow draft, her winches, power, her communications hubs, the Salvage Chief will be key in re-opening the Columbia River Maritime Highway, key to enabling resources and commerce to re-enter our region again. No other vessel has her ability. No other veteran can serve this unique mission.

Between now and then, what? As you may know, if we "prepare for one, we ready for the other" disaster. Cowlitz County WA and Columbia County OR partner informally in mutual aid. We share resources, information, a river. We each wish to access the service capacities of the Salvage Chief to exercise response and recovery between our shared river highway. We need the help of SB 678 to ready the Salvage Chief; to enable her to independently travel the Columbia River Maritime Highway and work with our communities toward building our readiness, our resiliency together.

We understand the Salvage Chief is older than she used to be, but she's not done yet. Like any other veteran she has more to give. SB 678 funds bringing her into service once again and we humbly ask you to support SB 678.

Ready the Chief; Ready our Now, Ready our Future

SB 678

IN THE BOARD OF COMMISSIONERS

FOR PORT OF ASTORIA

Port of Astoria Support Resolution for	)	
Passage of Senate Bill 678	)	**RESOLUTION 2019-02**
M/V Salvage Chief Emergency Restoration	)	

WHEREAS, the Port of Astoria is a Public Body with Jurisdictional Oversight of The Columbia River including the Mouth of The Columbia River to as far Wauna Mill and is co-responsible for the passage of more than 8 Billion US Dollars of goods and Products on the Columbia River as well as Emergency Preparedness in its Port District AND

WHEREAS, the Federal Government, the Department of Defense and Local and State Emergency Professionals recognize the Impending Cascadia Disaster will collapse the Astoria Megler and Longview Bridges in a 8.0 or above Seismic Event creating a Horrible Disaster, with No Plan of immediate Recovery AND

WHEREAS, outside of the M/V Salvage Chief and possible Navy Resources, other resources to immediately attend to this huge disaster is not expected for weeks or maybe several months away AND

WHEREAS, The Home Ported M/V Salvage Chief, Home Ported in Astoria, Oregon has historically rescued and responded to disasters in the Port District for over 50 Years and is capable of pulling Bridge Sections from the Columbia River with its 6 - 100 Ton Winches and provide power with its 5- 250KW Generators, as well as provide its ability to function as floating Emergency Operations Center AND

WHEREAS, the State of Oregon Legislature has an Opportunity to Pass Senate Bill 678 that will restore Hope to the Rural and Port District in Funding Emergency Repairs to the M/V Salvage Chief AND

WHEREAS, the timing of the proposed Legislation is Critical and Timely and should be funded immediately upon passage as is appropriately written as Senate Bill 678.

NOW, THEREFORE BE IT RESOLVED, that the Port of Astoria Commission Supports the Passage of Senate Bill 678 and Funding of the Salvage Chief (LSM380) Foundation to "READY The CHIEF" in Emergency Repair of the Vessel to prepare for this Impending Cascadia Disaster and the Saving of Our Citizens Lives, if Necessary

APPROVED this 19 day of February 2019, by the Port of Astoria Board of Commissioners.

Frank Spence, President

Robert Stevens, Secretary

March 20, 2019

To: Senate Committee on Veterans and Emergency Preparedness

From: Tom Potiowsky
Northwest Economic Research Center, Portland State University

RE: SB 678: Repair, Upgrade, Return to Operations for the Salvage Chief

Good Morning Chair Olsen and members of the Committee. For the record, my name is Tom Potiowsky, former Director of the Northwest Economic Research Center (NERC) at Portland State University. I am here today on a volunteer basis and no funds were paid to NERC or to myself.

From a Homeland Security presentation slide dated June 13, 2018, they provide the following description of "Resilience":

- What is "Resilence"? The ability to prepare for and adapt to changing conditions and withstand and recover rapidly from disruptions.
- Includes the ability to withstand and recover from deliberate attacks, accidents, or naturally occurring threats or incidents.
- Key considerations: The "connectedness" of infrastructure; crucial dependencies and linkages of critical systems.
  Cascading impacts from disasters.
  Knowledge, planning, and coordination among critical infrastructure partners.

The Columbia River exemplifies the interconnectedness of industries and geography. You have the direct connection all the way from Lewiston, Idaho to the mouth of the Columbia. Then there is railway and trucking from parts of Washington, Idaho, and the Plains states that bring more commerce to the river. Here are a few descriptions of the economic value of what flows thru the Columbia River Basin and overseas[1]:

- The Northwest is ranked as the nation's #1 U.S. export gateway for wheat and barley and #1 on the West Coast for wood exports and #2 on the West Coast for automobile imports.
- Every year, over 42 million tons of commercial cargo is sent overseas from the ports on the Lower Columbia River
- Cruise ships carry 15,000 passengers a year on five to seven-day tours on the river, bringing an estimated $15 million to $20 million in revenue to local economies.
- $23 billion in waterborne cargo annually pass through the Columbia River Corridor.
- Columbia River ports identified 40,000 port-related Northwest jobs. Firms that ship cargo via the Columbia River employ an additional 59,000 workers annually

Project managers are concerned with process flows and make sure they identify "bottlenecks". A Cascadia Subduction Zone earthquake may likely block all the Columbia River commercial traffic making

[1] Sourced from various studies: Northwest River Partners (2014), Pacific Northwest Waterways Association (2016), Port of Astoria: Economic Impact Study (2009)

its way thru Astoria. Suspected debris following the earthquake could be the Astoria and Longview bridges. From the report, *Cascadia Subduction Zone Earthquakes: A Magnitude 9.0 Earthquake Scenario (2013)*, points out the problems of both moving out over the Columbia bar and moving back in toward Astoria:

"Shipping channels may also be disrupted by a Cascadia earthquake. Sections of the Columbia and lower Willamette rivers, for instance, are likely to be closed to shipping due to underwater landslides and the presence of debris where ground failures have caused parts of structures, such as bridges and electrical transmission towers and lines, to topple into the river." P.11

"Because of damage to shipping channels, it may not be possible to transport petroleum by boat from the refineries in Puget Sound to Portland and other points along the Columbia and Snake rivers. Without the ability to store and distribute liquid fuels locally, shortages are likely, affecting not only the use of vehicles and aircraft, but also critical facilities and key industries." P 12

The Salvage Chief is at the Tongue Point Job Corps Center, a maritime training program near the mouth of the Columbia River. With programs related to Clatsop Community College, Maritime Seamanship Student Training, and US military expenditures of $650K since 2015, the Salvage Chief is already contributing to the Astoria economy.

While a more in depth study would reveal more numbers on jobs, output value, tax revenues, and the like associated with the economic impact that percolates thru the economy, one can say that keeping the lower Columbia River operational is vital to the economic health of the region. The Salvage Chief presents itself today as the most viable option for removing any obstacles that could block the river due to a devastating act of Nature. And as the ships history demonstrates, it can be used in the meantime for any necessary salvage work and further training.

Tongue Point Job Corps Maritime Training Program

March 15, 2019

900 Court St. NE #209
Salem, OR 97301

Senators Betsy Johnson & Brian Boquist

Subject: Letter of Support for the SALVAGE CHIEF foundation & EFFORTS ON SENATE BILL 678

Dear Senators Johnson & Boquist,

It is my absolute pleasure to provide this letter of support for the repair, upgrade and return to operations of the SALVAGE CHIEF.

Based on our Maritime program's several interactions and work with the SALVAGE CHIEF Foundation, it is evident that they are passionate about readying the SALVAGE CHIEF for the capabilities necessary to help preserve public peace, health and safety during a declared emergency and other roles. Our program consists of 120 students, all between the ages of 18 to 24, which are considered under-served young adults. We train these students onboard a 78 year old, retired Coast Guard ship while underway on the majestic Columbia River. Over the past 4 years, our program has benefitted greatly from conducting "real world operations" with SALVAGE CHIEF. During these evolutions, our program has amassed over 7300 hours of internship time for our students and this has allowed them to gain valuable deck and engineering maintenance experience. The SALVAGE CHIEF foundation's pioneering spirit has been a great resource for our program to complete our overall mission of building proficient, professional and passionate Coast Guard credentialed Merchant Mariners.

In addition, the vision of the SALVAGE CHIEF becoming a fully functioning Columbia River training vessel, which prepares for disasters, is incredibly intriguing. If this vision becomes a reality, the SALVAGE CHIEF will open many more doors for "real world operations" for our program and more importantly, will allow for a multi-faceted and incredibly capable asset to be ready to answer the call when needed in times of emergency.

I strongly recommend and encourage the State of Oregon to fully support Senate Bill 678 and the SALVAGE CHIEF foundation. To continue to invest in this promising capability development will benefit a wide variety of causes. Due to my personal interactions, I firmly believe that the SALVAGE CHIEF foundation has the proficiency, professionalism and passion to provide a great return on Oregon's investment.

Very Respectfully and Sincerely,

L. R. Tumbarello, CAPT, USCG (Ret)

Len R. Tumbarello, Captain, US Coast Guard (retired)
Director of Maritime Training Program
Tongue Point Job Corps

CC: Chairman of the SALVAGE CHIEF (LSM380) Foundation, Don Floyd

GIBBS & COX
Maritime Solutions

2711 JEFFERSON DAVIS HIGHWAY • SUITE 1000 • ARLINGTON, VIRGINIA 22202

703.416.3600
FAX: 703.416.3679
www.gibbscox.com

March 18, 2019

900 Court St. NE #209
Salem, OR 97301

Attention: Oregon Senate

Subject: Letter of support for the Salvage Chief foundation and Bill 678

Dear Senators,

It is my pleasure to provide this letter of support for the Salvage Chief and Bill 678. Gibbs & Cox, Inc (G&C) is committed to supporting the repair, upgrade and return of the Salvage Chief.

As the original designers of the Salvage Chief, G&C is ready to support the return of this much needed vessel to service on the Columbia River. This vessel is uniquely equipped to service this region of the country in in the case of a natural disaster and will be instrumental in returning the river to a condition that supports commerce and our national defense requirements.

In addition to the Salvage Chief's disaster recovery capabilities, it is also a strategic resource for training students and others who are interested in the maritime industry. This vessel is uniquely equipped to accomplish this important mission.

Should you have any questions or the need for any clarification, please do not hesitate to contact either myself or our VP of Programs, Mr. Matthew Hans at (703) 416-3662.

We are looking forward to seeing the Salvage Chief restored and underway. Ready the Chief!

Sincerely,

CHRIS DEEGAN
Chief Executive and President
Gibbs and Cox, Inc.

Floyd Holcom

From: Hans, Matthew <mhans@gibbscox.com>
Sent: Monday, March 18, 2019 11:56 AM
To: Floyd Holcom; Prince, Kevin
Subject: RE: Salvage Chief Update for Gibbs and Cox

Floyd,

From our VP of engineering:

Although the Salvage Chief was designed as a World War II USN LSM, the design of the vessel is still applicable to today's mission requirements. The vessel was designed with 29 water tight compartments to ensure the highest degree of seaworthiness possible during wartime service, far greater than the required for any current commercial vessel. The modifications and maintenance that have been made to the vessel while in commercial service have maintained this high level of seaworthiness.

Matthew Hans, PE, PMP
Group Vice President
Platform Solutions Group
Gibbs and Cox, Inc
2711 Jefferson Davis Hwy Suite 1000
Arlington, VA 22202
Office 703 416 3662
Cell 703 946 7489
Fax 703 416 3679

https://www.facebook.com/GibbsCox/

https://twitter.com/GibbsCox

From: Floyd Holcom <fholcom@pier39-astoria.com>
Sent: Monday, March 18, 2019 2:09 PM
To: Hans, Matthew <mhans@gibbscox.com>; Deegan, Christopher <cdeegan@gibbscox.com>; Prince, Kevin <kprince@gibbscox.com>; Harper, A. Keith <kharper@gibbscox.com>
Subject: RE: Salvage Chief Update for Gibbs and Cox

Matt,

Thank you for the Reply!

Appendix C10

Dear Senator Monnes-Anderson, March 19, 2019

I am the ship's physician of The Salvage Chief and I am an Astoria native. I am involved in the Salvage Chiefs emergency preparedness training and readiness. I believe that everyone is in agreement that a Cascadia subduction earthquake will result in catastrophic damage, if not complete destruction of coastal communities. In Clatsop County, it is reasonable to conclude that both hospitals,Camp Rilea, USCG Air Station Astoria,and all utilities and public services will be destroyed. Bridges will be collapsed or impassable.

It has been suggested that it will be at least thirty days until meaningful disaster relief will begin to reach the coast. The Salvage Chief can play an unique role in emergency medical and trauma disaster response in conjunction with both state and federal support . It can supply over a million watts of shi-p to-shore power for 45 days or 250,000 watts of ship-to-shore power for 180 days without resupply, This could be used to power community relief efforts and a field hospital pre-stationed on the vessel. It has capacity for 100 tons of cargo and supplies. It has a helipad and its on board water filtration system provides 3,000 gallons a day of potable water a day without chemicals for any water source. The ship was designed to be offshore six months without needing resupply. I believe with your committees support, The Salvage Chief will have a critical role in disaster recovery.

Sincerely,

James R. Wirkkula, DO, FABFM from my iPhone

Date: 18 March 19, 2019

From: Ron Smith PA-C, MMSc.

Re: Testimony in support of SB 678 to provide funding for repairs and upgrades to the Salvage Chief (LSM380).

Dear Senators,

I greatly appreciate the opportunity to provide my enthusiastic support for SB 678. I am a medical advisor to the Salvage Chief Foundation, and have over 20 years' experience as a physician assistant working in emergency medicine and orthopedic trauma surgery. I am currently the senior PA in the Oregon National Guard serving as a Lieutenant Colonel at the Medical Command in Salem. In that capacity, I have been involved in planning for Cascadia Event response.

The Salvage Chief is uniquely suited to provide disaster relief and life-saving medical aid in the aftermath of a catastrophic Cascadia Event. The funding provided in SB678 is critical to the Chief's ability to fulfill that mission. During my deployment to New Orleans in response to Hurricane Katrina in 2005, I saw first-hand the devastation inflicted on a populace in the wake of a natural disaster. The scale of a Cascadia earthquake and tsunami would dwarf the destruction of Hurricane Katrina by several orders of magnitude. It is understood that coastal communities would be isolated and effectively cut off from aid for an extended period of time. The casualties from such an event are estimated in the thousands of dead and injured. In the days and weeks after a disaster of this scale many more people would die if medical assistance was not forthcoming. Fortunately, we have the Chief. The Chief's ability to produce over 3,000 gallons of clean drinking water could mean the difference between life and death to victims in town where the water supply has been contaminated or destroyed. The cargo capacity of the Chief could allow us to bring over 100 tons of critically needed medical supplies and equipment to communities that will otherwise be inaccessible. The ship-to-shore power generation capabilities of the Chief could easily supply the electrical needs of an on shore medical facility. The layout of the Salvage Chief would lend itself to the addition of currently available modular medical treatment systems. These could be fitted to the deck of the Chief to provide a floating emergency treatment facility. In addition, the upgrades to the Chief's emergency communications capabilities would provide essential coordination with those responding to the relief efforts.

The Salvage Chief has proven herself time and time again in both wartime and during decades of salvage operations around the world. I firmly believe she has another vital mission to fulfill in coming to the aid of our fellow citizens in the inevitable event of catastrophic natural disaster. I appreciate your consideration of this legislation and strongly encourage support for the efforts to Ready The Chief.

Sincerely,

Ron Smith PA-C, MMSc.

503-490-7297

rcs2510@mac.com

Floyd E. Holcom Testimony for SB 678, READY THE CHIEF!

Chair Olson, Senators, thank you for allowing me to Testify on behalf of the Support of SB 678, an Emergency Funding Bill that is clearly that, an Emergency. The ability for the Salvage Chief to perform the mission cannot be done after the fact, and that is why we are here to day.

Today, SB 678 is critical to the sustainability, reliability and resiliency of our State and I believe it is more than appropriate for the expedited passage of this Bill. This Bill merges the importance of rare Volunteer Veteran experiences with Emergency Management to prepare and be ready for waterborne emergencies with a modified Oregon World War 2 Veteran Vessel that has been historically recorded to perform more successful missions than any other Oregon vessel, anywhere, and while after 70 years it is still the only vessel able to perform the disaster mission it was designed to do. No other vessel has yet to be built or capable of meeting its similar specifications, and to build one new, could well be over 200 Million Dollars. One only has to say the words "Exxon Valdez" to know one of its many environmental victories.

With the passage of this bill, the ability for the ships Mission for the Salvage Chief will be to Train and Support our citizen Volunteers with experienced Veterans and must be ready for these future disasters by receiving its required and necessary repairs and inspections.

In order for this ship, an Oregon emergency tool, to be ready, it needs to go back to the dry dock, and upgrade for the disasters of tomorrow, now.

Our Citizen's lives can not be risked by kicking this can down the road and hoping it will find funds to be there, it needs your help to help this state with the passage of this bill.

You have heard or all read the testimonies from the Economists, Doctors, Naval Engineers, Emergency Managers but what is rarely revealed as what the ship has already done for Oregon's economy and the lives it has already saved, and it will do more. In its over 60 years of being home ported in Oregon, the Salvage Chief has already averaged more than a Million Dollars a year in Economic Development to Oregon, purchasing supplies, services and feeding families and employees in the Astoria Coastal Portland and Columbia River regions. From Brookings, to Astoria, to Port of Portland, to the Dalles, to Lewiston, ID, the Salvage Chief has done it and can continue to and be ready to perform with the passage of SB 678.

The Salvage Chief Foundation now needs a small portion of that investment back so it can continue to help save lives, help save the Columbia River and Oregon Economy and provide and perform the mission it historically has performed when this or other disasters strike. It needs to be ready now.

I have volunteered to perform over 30 years of Military and combat Service, in Special Forces, Combat Service is several Countries, as well as volunteered to serve in Two National Guard Units of Washington and Oregon. I and my private companies are one of the few Oregon Certified Disabled Veteran Small Business that continue to volunteer and support our community in every aspect of volunteerism. I knw the devastation of disasters, man made and made by nature.

You asked us to volunteer when the Storms destroyed the Tillamook Railroad, you asked us to Volunteer When the storms Wiped out the North Coast in Hurricane Winds that left that community devastated

for weeks. You asked us to volunteer to fight the Floods of Vernonia and jump into the forest fires of our state. In this future emergency, you won't be able to ask, as we will already on the job.

And now I'm volunteering to help you realize we will need to do it again, not if, but when the disaster strikes the Columbia River and our state's commerce. I'm asking you for the only tool available to succeed and for a you to explain to your fellow senators and representatives the importance of maintaining the Salvage Chief. We can be resilient in the emergency challenges of tomorrow.

I realize there are a lot of organizations requesting funds from this 2019 legislative session. However, there are very few requests that has already saved and invested more than 50 Million in this this State, and the request for 1.9 Million to get it ready is a much worthier cause for the survival and reaction to keep our citizens alive.

For this ship and our state to be truly ready, it needs the Passage of SB 678.

Ready The Chief!

Thank you.

Floyd E. Holcom

100 39th Street

Astoria, Oregon 97103

5033389829

Senate Bill 678, Financial analysis of the Salvage Chief Restoration for Emergencies

			SB 678 Emergency	*Matching and Other Return to State*	
SB 678 Emergency Request			**$ 1,900,000.00**		
Hull, maintenance and paint			$ 1,200,000.00		
Engine and Fire Pump Upgrades			$ 400,000.00		
Emergency Communication and USCG Inspection, Contingency			$ 300,000.00		
Match and Equivialents					
Cost to Build New Vessel, SC#2	Unfunded Approx		$ 100,000,000.00		
Fred Devine and Salvage Chief Investment into Oregon Econonmy since 1950, Not Taxes				$ 52,000,000.00	
Foundation Volunteer Hours To Date:(Per USGOV)	2015-Present	Hours			
Seamanship Program (Dept Labor)		7430*$24.89/hr		$ 184,932.70	
SC Staff Engineers and Crew		6558*59.35		$ 389,217.00	
Emergency Management Planners/ORANG		128*34.98		$ 4,477.00	
Other Volunteers(Radio Ham, Welders)		1745*25.45		$ 44,410.00	
Donations to Foundation	2015 - Present				
Salvage Chief LLC	Electrity, Paint, Other			$ 47,500.00	
Port of Portland	Barge St. Helens			$ 650,000.00	
Other Donations	Reunions/T-shirt sales			$ 42,000.00	
Existing Equipment on Chief Equivalencies Activities*					
Fire/Pump Capacity 2x300GPM					
2 1500 GPM Ballast Pump					
4 500 GPM Portable					
1 4500 GPM Dredge Pump	10,100 GPM	6.73 Fire Trucks			
	Above in # of New Fire Truck Equiv		6.73x500K	$ 3,365,000.00	
5x250KW Generators, use at $1365/wk, downtime of disaster 60 Days					$ 81,900.00
Emergency Operation Center				$ 2,500.00	
Trauma/life Support				$ 8,300.00	
Ham Radio Center Donation				$ 7,500.00	
Federal Investment/Expenditures 2015 to Date*					
US Army					
Training				$ 450,000.00	Each Dollar of Military Training in the Local State Economy can be x7 multiplier
Moorage of Chief	(No Cost to Chief)	2500/Mo		$ 120,000.00	
Repair of Dock for Chief				$ 17,000.00	
US Navy Training				$ 65,000.00	
USGS Dive Team				$ 12,000.00	
Nisqually Indian Dive Training				$ 5,200.00	
US Coast Guard				$ -	
* Not Funded by State or Local Governments					
	Approx Total Investment/Donations by Others			$ 57,415,036.70	

Video Link Exhibit

Date: **3/20/2019**

Committee: **Senate Committee on Veterans and Emergency Preparedness**

Bill Number/topic title: ***SB 678***

Submitted by: **Floyd E. Holcom**

Video Title: **Drone video: Salvage Chief could be upgraded for disaster service**

Video Link:
https://www.dailyastorian.com/multimedia/video/drone-video-salvage-chief-could-be-upgraded-for-disaster-service/video_63c24f54-2bfc-11e9-9711-e7c6c37c9250.html

Video Link Exhibit

Date: **3-20-2019**

Committee: **Senate Committee on Veterans and Emergency Preparedness**

Bill Number/topic title: ***SB 678***

Submitted by: **Don Floyd**

Video Title: **Ready the Chief-Salvage Chief SB 678**

Video Link: **https://youtu.be/iiCAHH6Uzqo**