

Washington Maritime Blue and the Blue Economy: using diversity and inclusion to advance social justice
in the maritime industry

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Abstract

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The Blue Economy movement is gaining global traction among marine resource stakeholders, but the concept is defined in multiple ways and some emerging initiatives are inconsistent in their adherence to one of the core founding Blue Economy principles of advancing social equity. In the United States, beyond maritime settings, social inequity is increasingly addressed through diversity and inclusion initiatives aimed at increasing representation of women, people of color, and other underrepresented groups. Washington Maritime Blue, a strategic planning initiative tasked with accelerating growth of the Washington state maritime industry, provides an informative example of how synergies between the Blue Economy concept and principles of diversity and inclusion can be used to advance the equity principles of the Blue Economy and address locally situated inequities with regards to race and gender. Through observations from Washington Maritime Blue meetings, analysis of demographic and wage data, and stakeholder interviews, this paper demonstrates that Washington maritime leaders have opportunities to improve efforts towards increasing diversity and inclusion throughout the maritime career pipeline and shape the global Blue Economy discourse. This paper also points to increasing evidence of business justifications for prioritization of workforce diversity and inclusion, suggesting Washington Maritime Blue may pursue such initiatives from a business as well as an equity perspective. Through targeted efforts to address race- and gender-based inequities in employment in the Washington maritime industry, Washington Maritime Blue leaders have an opportunity to position themselves at the forefront of the global Blue Economy movement and advance social justice in the state of Washington.

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1. Introduction

The idea of the Blue Economy (BE) has made great waves since its conceptual debut in the events leading up to and at the Rio+20 United Nations Conference on Sustainable Development in June 2012. In years since the Rio+20 conference, various governmental bodies, international institutions, non-governmental organizations (NGOs), and industries have entered the BE space. Yet beyond the obvious connection of BE initiatives to ocean-based activities and resources, consensus has not been built around a vision or parameters regarding what the term Blue Economy, also referred to as blue growth and the ocean economy, does and does not include. As a result, disjointed BE efforts have been established with varying degrees of cohesiveness with the original concept or with each other (Eikeset et al., 2018; Silver, Gray, Campbell, Fairbanks, & Gruby, 2015; M. Voyer, Quirk, McIlgorm, & Azmi, 2018).

One such initiative, and the focus of this paper, is Washington Maritime Blue (WMB), a year-long strategic planning task force established in 2017 by U.S. Washington state governor Jay Inslee. Led by a Maritime Innovation Advisory Council and facilitated by the Department of Commerce, WMB targeted three objectives: creation of a strategic plan to accelerate growth and advance the state's maritime industry; formalization of a maritime cluster to serve as a central maritime coordinating body; and establishment of an innovation center for maritime technology and research. Through key initiatives outlined in the planning process, WMB aimed to make the Washington maritime industry the most sustainable in the nation by 2050 (Department of Commerce, 2017).

One prominent point of tension in the BE discourse is concern that, without parameters in place to steer blue growth towards improvements in social equity, the BE label will simply become another tool that marine industries and elites will use to funnel benefits of the ocean economy to themselves at the expense of local users and communities (Bennett, 2018; Bennett, Govan, & Satterfield, 2015; Hadjimichael, 2018). One example of how this might happen in Washington is found in the demographic composition of the maritime industry. The Washington maritime industry, like many others, has a history of race- and gender-based exclusion¹. Though discrimination based on race or gender is no longer codified, its remnants perpetuate structural barriers to equal access to maritime jobs and, as a result, the benefits derived from marine activities in Washington are neither equally nor equitably distributed. Thus, in Washington, women and people of color are an example of local users and community members who could be further disenfranchised by a blue growth strategy that does not explicitly consider their interests. For this reason, WMB provides a useful example to explore the practical opportunities and implications of a locally situated BE initiative that explicitly considers social equity.

Beyond maritime settings, social inequities, particularly regarding race and gender and workforce demographics, are increasingly addressed through initiatives aimed at promoting diversity and inclusion within the workforce. Since garnering widespread attention in the U.S. during the 1960s in response to Civil Rights laws, numerous public and private sector institutions have signaled their adoption of diversity and inclusion principles in various ways, including emphasizing diversity as a company value in recruiting and hiring processes, as well as establishing positions and entire departments specifically designed to increase diversity within the institution. Similar to the BE concept, literature and practice in diversity and inclusion is varied and definitions of success are highly context dependent (Joshi & Roh, 2009; Shore et al., 2009; Shore, Cleveland, & Sanchez, 2018).

The purpose of this paper is to bring the BE concept together with principles of diversity and inclusion to answer the following research question: How can historical and current race- and gender-based inequities be addressed in the implementation of the WMB strategic plan? This research contributes to the literature on the BE by providing a benchmark analysis for future initiatives as one way to incorporate social equity principles into blue growth strategies. This research also contributes to the literature on diversity and inclusion by providing a place-based example for application of diversity and inclusion principles in ocean-based trades. Finally, this research highlights a potential business justification and provides

¹ For the purposes of this paper, race and gender are defined by the U.S. Census categories of race and sex. The term "gender" is used interchangeably with "sex" throughout this paper when referring to employment demographics obtained from U.S. Census data and in the maritime industry.

recommendations to WMB and state and industry decision-makers for prioritizing diversity and inclusion in implementation of the maritime industry strategic plan.

The research question is answered with a combination of quantitative and qualitative data, including observations from attendance at Washington Maritime Blue planning meetings, analysis of trends in demographic employment and wage data in the maritime trades, and qualitative interviews conducted with Washington maritime industry stakeholders. The next section of this paper will provide a brief introduction to the Washington maritime industry and examine and draw connections between literature and practical applications of BE and of diversity and inclusion principles. Section 3 will provide methods used to conduct this research, and Section 4 will expand on results from quantitative and qualitative data collection and analysis. Finally, Section 5 will describe how WMB might use this research to advance social equity in the maritime industry in terms of race and gender, as well as offer suggestions for decision-makers and implications for future BE initiatives.

2. Bringing together the Washington maritime industry, the Blue Economy, and principles of diversity and inclusion

2.1 The Washington maritime industry: a graying fleet with a history of exclusion

According to the Washington State Department of Commerce (2016), the state's maritime industry is comprised of the following seven sectors: cargo handling and logistics; fishing and seafood processing; ship and boat building, repair and maintenance; passenger vessel operations; recreational boating and sport fishing; military and federal activities through the U.S. Navy, U.S. Coast Guard and NOAA; and numerous support industries, including maritime education and training programs. Taken together, these sectors illustrate the expansive reach of the state's maritime activities, including its importance in trade, tourism, research, and national security. In 2015, the industry accounted for 69,500 direct jobs, supported 121,600 jobs indirectly, and paid \$4.7 billion in wages. Washington is home to the fifth largest container gateway in North America and operates the country's largest ferry system (Community Attributes Inc., 2017; "WSDOT - Washington State Ferries Our Fleet," n.d.) Yet despite its economic importance throughout the state, the Washington maritime industry has struggled in recent years to meet labor needs (Davis, 2016). The average age of a Washington maritime worker is steadily increasing, positioning a substantial proportion of the maritime workforce for retirement in the next decade. As this happens, industry leaders anticipate a severe labor shortage that could result in a major change and even crisis in the functioning and productivity of the industry (Cussins, 2018; Greenstone, 2017). The discussion is so widespread within maritime circles that insiders have adopted the nicknames "graying of the fleet" and "silver tsunami" to represent the advancing age and impending retirement wave of maritime workers.

Though this paper focuses largely on the maritime industry as it is understood today, there was a maritime sector in what is now Washington state long before it was named and housed in the Washington State Department of Commerce. Indigenous peoples in the Pacific Northwest have used the Puget Sound and coast to fish, travel, trade, and support livelihoods since time immemorial. The coast Salish societies were at least partly maritime. The arrival of Europeans in the late 18th century, followed by political pressure, violence, treaties in the mid-19th century, and continued oppression and degradation of coastal ecosystems, have led to a version of the maritime industry today that differs from its historical origins (Thrush, 2006).

Race played a prominent role in maritime employment in the late 19th and early 20th centuries, as predominantly white, male policymakers and union leaders dictated who was able to participate and in which subsectors and positions. For example, In the 1880s and 1890s, the Chinese Exclusion Act and anti-Chinese sentiment impacted not only Chinese but also other Asian groups' participation and treatment in salmon canneries (Friday, 1994). In the early 20th century, ninety-one of Seattle's 100 local unions, including those based in maritime trades, excluded or discriminated against people of color. White women's unions practiced racial exclusion as well (Frank, 1994).

Maritime workers, particularly mariners, began to organize and protest working conditions in the early 1880s. Throughout the next several decades, unions from both seagoing and shoreside maritime trades merged, split, and experienced varying degrees of success in having their demands met for improved wages and conditions. The issue of racial exclusion was often one that contributed to division among the groups. Strikes during this period amplified volatile race relations, as people of color who were excluded from unions were hired by employers as strikebreakers. The “boom and bust” nature of maritime work, which was especially pronounced during wartime years, also impacted the degree to which anti-racist unions and leaders were able to draw attention to issues of racism (Larowe, 1970; “Waterfront Workers History Project,” n.d.; Winslow, 1998)

Women have also traditionally been excluded from modern maritime trades globally, both through codified laws and through societal norms and perceptions of their unsuitability for maritime work (MacNeil & Ghosh, 2017). Though efforts have been made to increase gender diversity in maritime industries in Washington and throughout the world, the International Transport Workers Federation estimates that as of 2016 women made up only two percent of the seafaring maritime workforce (International Transport Workers Federation, 2016).

Since the early 20th century, maritime sectors and unions have continued to evolve and respond to changes in the demographics of the local population and advances in technology, with automation and containerization having a notable impact on the skills required and size of the maritime workforce (“Longshore Workers and Their Unions,” n.d.). Additionally, the internal culture of maritime work, which prides itself on being tough, loud, and hypermasculine, has perpetuated a spirit of exclusion towards those who do not conform.

2.2 The Blue Economy: a new era for ocean-based equity or a new buzzword for ocean grabbing?

The Blue Economy was conceptualized in preparatory documents and discussions prior to the Rio +20 UN conference, as well as at formal and side events during the conference (Silver et al., 2015; United Nations Environment Programme, 2012). Despite its use in conference proceedings and thereafter by the public and private sector and NGOs, most institutions have provided their own definition and a single definition of the BE has not emerged (Silver et al., 2015; Voyer & van Leeuwen, 2019; Voyer et al., 2018). Analysis of conference proceedings and documents by Silver et al. (2015) and of subsequent ‘grey literature’ by Voyer et al. (2018) led to the identification of four ‘lenses’ through which the majority of actors perceive and invoke the concept of the BE: the ‘oceans as natural capital’ lens, which emphasizes the need for standardized valuation of marine ecosystem services for the benefit of conservation; the ‘oceans as livelihoods’ lens, characterized by Silver et al. (2015) as ‘oceans as integral to Pacific SIDS’ and ‘oceans as Small-Scale Fisheries Livelihoods’ lens, which emphasizes the use of marine resources for poverty alleviation and advances in economic equity; the ‘oceans as good business’ lens, which emphasizes the economic growth sought largely by maritime industries and the private sector; and the ‘oceans as a driver of innovation’ lens, which emphasizes new ways of using the ocean, including developing new extractive technologies and innovative financing schemes (Silver et al., 2015; Voyer et al., 2018). For the purposes of this paper, Washington Maritime Blue, because of its emphasis on economic growth and innovation, is considered to operate from the ‘oceans as good business’ lens and the ‘oceans as a driver of innovation lens.’ However, some WMB leaders have signaled interest in incorporating principles of other lenses into the final strategy as well.

Use of the term was modified, debated, and contested in Rio+20 preparatory proceedings. However, its adoption by Pacific Small Island Developing States (SIDS), borne largely from the idea that the planned emphasis on the “green economy” and land-based sustainable development inadequately represented their resources and goals, encouraged its use among other conference attendees and has contributed to BE discourse regarding the importance of equity considerations within BE initiatives (Voyer et al., 2018). The BE concept has also been discussed in the context of ‘sustainable development’ and ‘triple bottom line’ approaches to industry activity in the private sector (Eikeset et al., 2018; Voyer et al., 2018), but here again some have noted the inconsistent (Mulazzani & Malorgio, 2017) and even contradictory (Bennett, 2018; Hadjimichael, 2018) coupling of BE and sustainable development.

That the BE does not have a single definition is of concern among various marine stakeholders. For example, the World Wildlife Fund (WWF) in 2015 released “Principles of a Sustainable Blue Economy,” emphasizing their concern that without clearly defined criteria, any marine-based activity could be labeled as part of the BE irrespective of whether or not it considers environmental sustainability (World Wildlife Fund Baltic Ecoregion Program, 2015). Nonetheless, Voyer et al. (2018), suggest that, in light of the competing perspectives from which BE initiatives are conceptualized, adoption of a single definition could be a detriment to certain actors and inadvertently limit the concept’s adaptability to local contexts.

Others have expressed disquiet from a social justice perspective, noting that “ocean grabbing” is likely to continue and evolve from historical “land grabbing”, resulting in the disenfranchisement of small-scale, local marine resource users to the benefit of elites or powerful commercial and foreign actors (Bennett, Govan, & Satterfield, 2015). It is this concern for equity and justice at sea that motivate my efforts to consider the social pillar of sustainable development of the maritime economy, and for this reason, I turn next to consider a key means of addressing equity in the U.S. context: diversity and inclusion programs.

2.3 Evolving understandings of diversity and inclusion in the workplace

The literature on diversity and inclusion is vast and extremely diverse itself, and a comprehensive review is outside the scope of this paper. Though no single definition has been established, diversity generally refers to the characteristics of individuals in a group that make the group heterogenous insofar as it relates to the characteristic in question. For the purposes of this paper, diversity is used to refer to the demographic composition of the maritime workforce with regard to two demographic classifications of “Worker Characteristics” in United States Census Data: race and sex (*Longitudinal Employer-Household Dynamics*, n.d.).

Early advances in research on diversity and inclusion were sparked in large part by passage of the Civil Rights Act, which prompted human resource departments in organizations to identify and respond to discriminatory processes in recruitment, hiring, and evaluation of workers. Though some have received more academic attention than others, this research has largely focused on race, gender, age, disability, sexual orientation, and national origin (Shore et al., 2009). Studies in diversity and inclusion have focused on both inherent diversity, which includes attributes such as race and gender, as well as acquired diversity, which includes experiences such as education and skills; levels at which diversity may impact a workplace, ranging from the individual to the organization; and has been conducted within numerous fields, including education, health care, corporate firms, and shipping (for examples, see Dobbin & Kalev, 2007; Progoulaki & Theotokas, 2016; Sturm, 2006; Valentine & Collins, 2015). The literature is mixed on the question of whether diversity has positive or negative effects on performance measures; however, this may be due in part to the variety of theories and methods used to study outcomes, as well as broad range of levels and contexts within which diversity is examined (Herring, 2009; Joshi & Roh, 2009; Shore et al., 2009).

When diverse workforces have been shown to yield positive performance outcomes, results have been linked to increased innovation and creativity and improved customer perceptions; on the other hand, negative impacts have been linked to increased conflict and turnover and less satisfaction and integration (Herring, 2009; Shore et al., 2009). Drawing on empirical data from a sample of U.S. for-profit businesses, Herring (2009) demonstrates that increased race and gender diversity yields higher sales, market share, profits, and more customers, and suggests that increased diversity can simultaneously be good for business performance and challenging for internal dynamics because in-group conflict tends to produce more innovative thinking. More recently, high-profile institutions such as Morgan Stanley (Morgan Stanley, 2017; Reid, 2018), McKinsey & Company (Hunt, Layton, & Prince, 2015), and Harvard Business Review (Hewlett, Marshall, & Sherbin, 2013) have echoed Herring’s (2009) findings that increased race and gender diversity can improve performance outcomes for corporations, clearly signaling a business justification for for-profit businesses to invest in diversity and inclusion programs.

Though typically closely connected in practice and sometimes used interchangeably in literature, diversity and inclusion are distinct concepts. Whereas diversity is concerned with the existence of heterogeneity in a workforce, inclusion is concerned with the internal dynamics of a workforce with specific consideration of those individual differences that make the group diverse (Nair & Vohra, 2015; Shore et al., 2018). The literature continues to evolve in its delineation of characteristics that make a workforce inclusive, though much like the literature on diversity, results can be context specific. Some indicators of inclusion considered in the literature have been workers' decision-making influence, access to sensitive work information, and job security (Pelled, Ledford, Jr., & Mohrman, 1999), as well as employee support groups and demonstrated commitment to diversity, among many others (Roberson, 2006). Increasingly, diversity initiatives – particularly those deemed unsuccessful – are criticized for lack of consideration of the need for inclusion in addition to diversity. In mainstream media as well as in academic literature, this shortfall is often referred to as the “add women and stir” phenomenon, illustrating the point that increasing diversity in the workforce is necessary but not sufficient for removing barriers that were previously hindering diversity (Boxer, 1982; Dharmapuri, 2011; Tadros, 2010; Tint, 2004)

3. Methods

3.1 Observations of WMB planning meetings

To answer the research question, qualitative and quantitative data collection and analysis methods were used. Between July 2018 and January 2019, I attended, observed, and, when applicable, participated in four WMB working group and steering committee meetings. During these meetings, maritime industry leaders participated in group and break-out sessions to identify priorities, pathways, and demonstration projects for finalization of a strategic plan for advancing the goals of the maritime industry. I took notes at each of the meetings, with the broad goal of establishing a baseline understanding of maritime leaders' considerations of structural inequities within the maritime industry. In one meeting focused specifically on workforce development, WMB participants were asked to share what they perceived to be the greatest barriers to equitable employment within the maritime industry. Responses to this question were noted and helped to illustrate how the demographic composition of the maritime industry is perceived by leaders, as well as what leaders perceived to be barriers to underrepresented groups.

3.2 Demographic and wage data collection and analysis

To supplement information obtained from WMB meetings, I collected publicly available demographic employment data for maritime industry subsectors from 1991 to 2018. U.S. Census Longitudinal Household-Employer Dynamics (LEHD) data were used, as this is the only source for employment data that includes demographic information. For confidentiality purposes, demographic variables can only be viewed individually; as a result, it is not possible to view interactions between race and gender in maritime employment data. LEHD data are delineated into sectors and jobs by 3- and 4-digit North American Industry Classification System (NAICS) codes (Executive Office of the President, Office of Management and Budget, 2017), which provide little detail and present challenges for comprehensive analysis of industry and subsector trends. Thus, in order to avoid counting maritime industry workers who may not have been employed exclusively in the maritime industry, only those NAICS codes which were unambiguously maritime were selected. This resulted in analysis of eight maritime industry subsectors: aquaculture; fishing; seafood product preparation and packaging; ship and boat building; deep sea, coastal, and Great Lakes water transportation; inland water transportation; scenic and sightseeing transportation; and water support activities for water transportation.

In addition to demographic employment data, I collected publicly available wage data for maritime industry subsectors from 2000 to 2018 from the Washington Employment Security Department Quarterly Census of Employment and Wages (QCEW). QCEW data are delineated into sectors and jobs by 6-digit NAICS codes, providing more detail than demographic data but creating another challenge in cross-referencing demographic data with wage data. Additionally, it is possible that the lack of more detailed codes creates a blended view of professional and trade-based jobs, which may minimize gaps in wages

that would be identified if codes were more distinct. To maintain consistency, only those NAICS codes which matched those chosen for demographic data were selected. Still, this resulted in analysis of 18 maritime industry subsectors: finfish and shellfish farming and fish hatcheries; finfish and shellfish fishing; seafood product preparation and packaging and canning; ship and boat building and repairing; deep sea freight and passenger transportation; coastal and Great Lakes freight and passenger transportation; inland water freight and passenger transportation; scenic and sightseeing water transportation; marine cargo handling; navigational services to shipping; and other support activities for water transportation.

3.3. Maritime industry stakeholder interviews

Finally, to supplement information obtained from WMB meetings and demographic and wage data analysis, I conducted qualitative interviews with Washington maritime industry stakeholders to gain a more comprehensive understanding of the experiences of women and people of color in the Washington maritime industry. To establish initial interview contacts, I obtained referrals from WMB task force members and contacted potential interviewees via email and by phone, with some introductions made by referring individuals via email. At each subsequent interview, I obtained referrals from participants and used snowball sampling to obtain contacts for additional prospective interviewees with the goal of creating a purposive sample (Palys, 2008). Because I sought information about the experiences of women and people of color in the maritime industry, I sought women and people of color, in addition to white men, to inform this research. As a result, the interview sample includes more women and people of color than is representative of the maritime industry as a whole. Participants were involved in public and private maritime sectors, represented and unrepresented work, and had experience shoreside and underway as well as in workforce development and marine and maritime policy. Due to the connection of this research with WMB and industry leaders, interviewee referrals resulted in a sample consisting largely, though not exclusively, of people in managerial and decision-making positions. Additional information regarding the composition of the interview sample can be found in supplementary materials.

Twenty-two individuals were interviewed between October and December 2018. Two interviews were conducted in group settings, with one group of two participants and one group of three participants. Interviews were conducted and recorded in person and on the phone, lasted from 30 to 90 minutes, and were later transcribed and thematically coded using Atlas.ti (Atlas.ti, 2019). During transcription and again in the writing of this text, “filler” words such as “like,” and “um,” were removed when doing so did not impact the meaning of the text or selected quote. Interviews were conducted in a semi-structured format, ensuring some level of standardization while allowing flexibility to respond and ask follow-up questions based on participants’ individual responses (Galetta, 2003; Given, 2008; Leech, 2002). The overarching themes of interview questions were: 1) Does the narrative of Washington maritime being “white-male dominated” accurately capture your experience? If not, what is missing? 2) What barriers prevent underrepresented groups from considering work in the maritime industry? 3) What barriers prevent underrepresented groups from accessing jobs in the maritime industry? 4) What barriers prevent underrepresented groups from maintaining employment in the maritime industry? 5) What are your perceptions, including but not limited to best practices, failed attempts, and predictions, regarding diversity, inclusion, and equity in the Washington maritime workforce? As Blickenstaff (2005) notes, women in higher education and in STEM in particular are underrepresented because of a “sex based filter” through which women are lost throughout the pipeline (p. 385). In this vein, question design was intended to probe at findings from WMB meetings and demographic and wage data, as well as to capture experiences along the maritime career pipeline that might inform decision-makers’ future prioritization of initiatives.

4. Results

4.1 Observations of WMB planning meetings

As noted above, the WMB meeting focused on workforce development was particularly informative in gaining insight into maritime industry leaders’ perception and goals regarding race- and gender-based

equity in the Washington maritime industry. When asked in a group discussion what the barriers were to equitable and inclusive employment in the maritime industry, three major themes emerged. First, leaders were concerned about industry awareness and a lack of public understanding of what the maritime industry is and what the pathways to employment in the maritime industry are. This was especially concerning in the context of an aging workforce and impending wave of retirement, as the labor shortage and lack of public engagement threaten the productivity of the industry. Second, attendees noted that maritime education, training, and apprenticeship opportunities are not exploited to their fullest potential and that industry employers are slow to provide funds or facilitate partnerships to increase and improve educational opportunities for those who do express interest in maritime careers. Though these first two themes are concerned with all prospective maritime workers irrespective of race and gender, it was noted that these problems can be exacerbated in communities that have not traditionally been represented in the industry. Relatedly, the third major theme that emerged was that industry leaders have not leveraged partnerships with organizations and influencers who are engaged with underrepresented communities such as women, people of color, and people from rural communities. As a result, attempts at connecting with those communities have sometimes not been well received or have not been fruitful. Breakout and small-group discussions also provided useful information, namely that the maritime industry is perceived to be a “white-male dominated” industry and that this presents challenges for incorporating diversity and inclusion principles into workforce development initiatives.

3.2 Demographic and wage data analysis

For the purposes of this paper, the demographic composition of the population of the state of Washington was used as a reference to illustrate how representative the maritime industry is of the state population (Table 1). As the literature is inconclusive on the question of how diverse any given workforce should be, the Washington population provides an initial standard for comparison for where diversity and inclusion priorities may be directed. At the industry-wide level, Census data confirmed that the majority of maritime workers are male, and that three race groups are underrepresented: Asian, Black or African-American, and people who identify as belonging to two or more races. At the subsector level, there is more variation in both race and gender. Males are overrepresented in every subsector, but white workers are overrepresented in only three subsectors: Scenic and Sightseeing Transportation, Inland Transportation, and Ship and Boat Building and Repair. Given that non-male, non-white groups are considered generally by maritime industry leaders to be underrepresented in the industry, it is notable that there are subsectors in which those groups are overrepresented. For example, four out of the six race groups are overrepresented in the Seafood Packaging and Preparation subsector: Asians, Black or African-Americans, American Indian or Alaska Natives, and Native Hawaiian or Other Pacific Islanders. Three of the six race groups are overrepresented in the Fishing subsector: Asians, American Indian or Alaska Natives, and Native Hawaiian or Other Pacific Islanders. Overrepresentation of some race groups in some subsectors reveals that, while the industry overall is white-male dominated, there are subsectors of the maritime industry that are more gender and racially diverse than others.

Table 1: Percent of population in Washington and in maritime industry (median, 1991-2018)

	White	Asian	Black or African American	American Indian or Alaska Native	Two or more races	Native Hawaiian or Other Pacific Islander	Male	Female
<i>Washington</i>	86	7	4	2	4	1	50	50
<i>Maritime Industry</i>	86	5	3	2	3	1	76	24
<i>Scenic & Sightseeing Transport</i>	92	2	2	2	3	0	53	47
<i>Inland Transport</i>	91	2	2	1	2	2	84	16
<i>Ship & Boat Building, Repair</i>	88	5	3	2	2	<1	87	13
<i>Deep Sea & Coastal Transport</i>	86	5	4	1	3	1	65	35
<i>Support Services</i>	86	3	6	1	3	1	85	15
<i>Aquaculture</i>	81	5	2	5	4	1	73	27
<i>Fishing</i>	79	8	4	3	3	2	87	13
<i>Seafood Packaging & Prep</i>	64	21	6	3	3	2	71	29

Note: shaded cells indicate overrepresentation relative to Washington population.

Wage data (Figure 1) reveal that the Seafood Preparation and Packing and Seafood Canning subsectors, where four out of six race groups are overrepresented, is the sector of the maritime economy with the lowest wages. The Fishing subsectors, however, where three of the six race groups are overrepresented, provide an interesting contradiction: the Shellfish Fishing subsector is in the bottom half of industry wages, whereas the Finfish Fishing subsector includes the highest wage earners in the industry, though this may be distorted by the high wages earned by skippers and boat or quota owners. Additionally, the Scenic and Sightseeing Transportation subsector, where proportion of women workers is highest (47%), is third from last in industry wages. As interviews later revealed, overrepresentation in seafood processing might be explained by the undesirability, “low barrier to entry” nature of processing jobs, and lack of union representation, while overrepresentation in fishing might be explained by the challenging nature of seagoing work, which often requires recruitment from outside white male fishing communities.

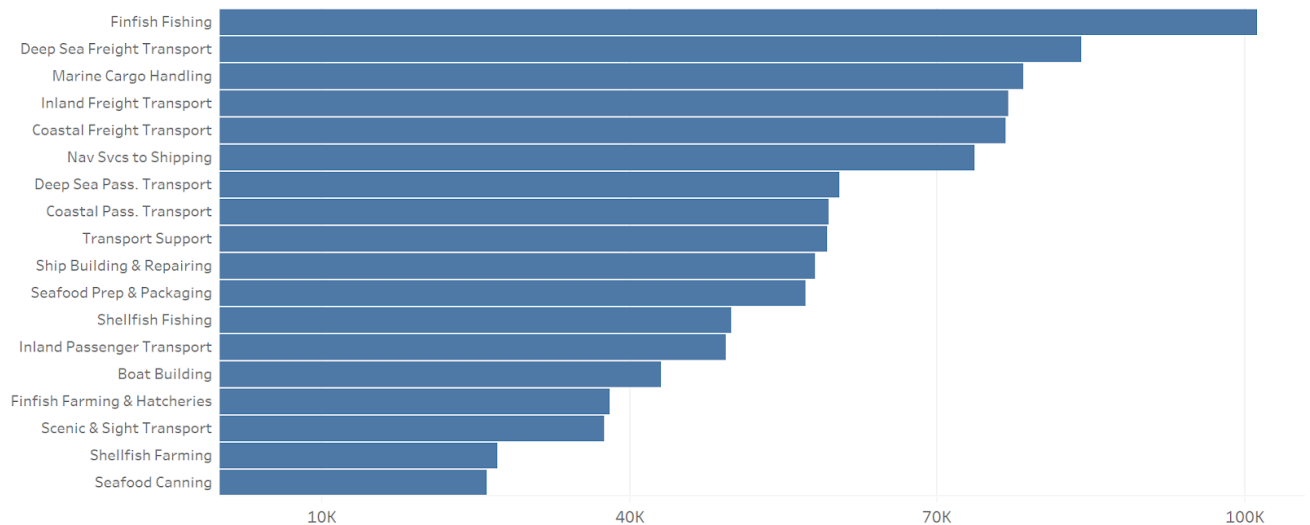


Figure 1: Average yearly wage by maritime subsector (1991-2018).

4.3. Maritime industry stakeholder interviews

Interviews with maritime stakeholders provided further insight into the themes that emerged in WMB meetings and to the demographic and wage data. Themes in interview responses are outlined below according to the corresponding interview question asked. For confidentiality purposes, interviewees’ identities are anonymized.

Washington maritime as a “white-male dominated” industry

Asked whether the term “white-male dominated” accurately reflected their experiences in the Washington maritime industry, all interviewees agreed that they would either use that label for the groups they worked with or for certain subsectors of maritime work they were familiar with:

“I would say it’s a pretty diverse group of people from all around the world and the country that are working at least in the processing positions. A lot of deck positions, which you might consider more of fishing or real house positions, do seem to tend to be a little bit more white-male dominated...in general the processing vessels probably have a lot more diversity than just a catcher boat.” (P11)

“There’s wonderful diversity on those cruise ships, right? There’s a bunch of white people making a lot of money up in the wheel house and there’s a bunch of brown people down in the engine room that no one sees, making shit.” (P10)

“Particularly on the shore side, it’s very white male dominated. When you go out to sea, there’s lots of different ethnicities.” (P18)

“There are jobs on the waterfront that are very diverse. Take the truckers. And they’re also not paid well.” (P9)

“I think in general [diversity is] going to be in production positions within aquaculture and then seafood processing. It’s a low wage, low skill job with a low barrier to entry...it’s like agriculture in general.” (P6)

“I would disagree. Particularly water born maritime, on ships. First of all, it is predominantly male. But it is not predominantly white.” (P13)

“Most of the [diverse] groups are on processors, canneries and stuff.” (P19)

“Once you get out of the highest positions like captain there’s a lot more age diversity but very little ethnic diversity and very few women.” (P22)

Interviewees largely agreed with the narrative that certain sectors of the maritime industry are “white-male dominated,” with some believing it described the industry as a whole. The interviewees who challenged the label all noted the racial diversity they have seen in maritime jobs that involve being at sea or in seafood processing. One reason for this may be that seafood processing jobs and other low-ranking positions on ships are considered low barrier to entry and pay lower wages compared to other subsectors. Such jobs are also typically unrepresented by unions, which may lead to higher numbers of marginalized groups in those sectors. No interviewees challenged the “male” component of the “white-male dominated” label.

Maritime employment pipeline

When asked about barriers along the maritime employment pipeline – from the moment a person would consider a career in maritime to the day they would retire – various themes emerged. Those themes are outlined below, along with recommendations suggested by interviewees for addressing barriers where applicable.

Awareness

Interviewees were almost unanimous in their concern that the average Washingtonian is not aware of what the maritime industry is and how economically important the industry is for the state:

“I think people just don’t know about it. We’re in this geographically perfect place and water is all around us and people don’t have a connection to the commercial side of the water. They have a connection to the recreational side and the beauty but they don’t get how much commerce affects every single person every day.” (P18)

"It's the industry that's hidden in plain sight. We as a region have lost our historical connection to the waterfront in many respects." (P6)

Some interviewees described reasons why people in Washington are not aware of the maritime industry. Particularly in the greater Seattle area, there are a number of widely known industries and employers, including Boeing, Amazon, Microsoft, Starbucks, and Costco. Some interviewees noted competition with these ubiquitous names:

"Kids have a better sense of what aerospace is. They have no idea what maritime is. I think that is a challenge for the industry in general. There has to be a massive public education program to get out there and talk to youth about what maritime is and all the different possibilities it could bring." (P3)

"If somebody is really good at math and science, where we live in Seattle, if you were the first person to go to college in your family or one of the first few to go to college in your family and you were really good at math and computers, I feel like going into the tech industry makes way more sense than picking being a fish biologist or a stock assessment modeler or that kind of thing." (P16)

Other interviewees attributed the lack of awareness to a societal trend driven by parents and schools to prepare students for a university education instead of jobs or careers in the trades:

"Parents don't want K-12 doing that kind of training. They want college ready. Every kid is gonna go to college... You need to get a degree! You need to get some sort of degree if you want a good job.' It's this, educate them into good jobs and, you know, the bad jobs, that's for the losers." (P10)

"Parents don't want to see their kids, if they join this [maritime training] program are they gonna go to Alaska on a ship? What is this about?" (P2)

Interviewees also commented on a lack of initiative on the part of the maritime industry to invest funds or resources into creating a recognizable brand or maritime narrative:

"You've been around for over a hundred years, and yet no one knows what you do? What have you been doing for that long so poorly that no one knows what you do?" (P12, in reference to a specific maritime organization)

"As an industry across all sectors we've done a horrible job of telling our story...and that's part of what I see as the problem, is who's going to pay for it? We don't have a Boeing that's like, 'Hey that's good business for us' because it's too different." (P18)

Interviewees described the awareness issue as one that is pervasive throughout Washington, independent of race or gender. However, some interviewees noted that women and communities of color are less likely to be aware of maritime than men or predominantly white communities because of historically family-based preference in hiring practices:

“One of the most common pathways of entry is through familial connections...you don’t have that lingering [discriminatory] policy, but you’ll have lingering effects.” (P6)

“Thirty years ago, if I’m a longshoreman my son is going to have a leg up in that dispatch process right? And so you have families in the longshore industry and that’s just one tiny piece of maritime but a tiny, well compensated piece.” (P9)

“I think those jobs have traditionally just been like father-son kind of. I don’t think girls are aware of it.” (P13)

“I’ve met several of the folks that are on the vessels here who have lineage as far as family members that have...came from Scandinavian countries and have lived near and in the maritime communities all of their lives and have that connection. We’ve [communities of color] got a long way to go to kind of make up ground for some of that.” (P15)

“If you have an industry and a workforce that is less diverse, then you really don’t have those kind of informal connections to communities, nor understanding of who the communities are.” (P8)

Lack of public awareness about the maritime industry was of significant concern to most interviewees, especially in the context of the anticipated labor shortage. Though interviewees viewed awareness as an urgent state- and even country-wide priority, interviewees suspected that the disconnect is even more pronounced among women and people of color. Though these discriminatory practices are no longer codified, it is possible that the effects are lasting because women and people of color are less likely than their white male counterparts to have historical and familial connections to the maritime industry, resulting in lack of exposure to industry jobs, maritime workers, and working marine environments.

Interviewees’ ideas for addressing the awareness issue ranged in specificity, but a need was consistently expressed for early maritime education and exposure, both formally and informally. Some interviewees emphasized the importance of targeting more diverse youth audiences in awareness initiatives:

“You want the kid to get to a point where, ‘I want to be an astronaut!’ well maybe it’s ‘I want to be a mariner!’ That’s what we need to get to...Or as they start reading, it’s the firewoman instead of the fireman or it’s the female mariner or the captain ‘she’, it’s like our examples need to start being more inclusive. Or when we show the pictures, well maybe it’s a Native American, or it’s someone of Chinese descent. I think until we start really getting those materials to begin with of

how we teach our children, both as parents or even in our educational system, we've gotta start seeing change in the material so people can start identifying with what that is." (P21)

"But you need to tell people early on when they're in high school and when they're getting out into the workforce that maritime jobs, fishing jobs, fishing policy jobs, are available and interesting lines of work...If you don't have qualified people to hire that are diverse then you can't increase diversity in your workforce. You need to build diversity into the trained and qualified population out there." (P16)

Access

After discussing awareness, interviewees were prompted to imagine that public awareness of the industry was no longer a barrier to equitable employment. They were then asked to describe barriers that might still prevent a woman, person of color, or otherwise underrepresented person from seeking or attaining a job in the industry.

Interviewees described experiences they or their colleagues had had in which a person was discouraged from moving forward in the recruiting or hiring process because they did not see people in the industry that they could identify with:

"The message I'm getting from the communities I'm working with is that we want instructors that look like us. That's a pretty powerful message." (P7)

"I will say that it was difficult to see myself in those roles because there weren't as many women filling them." (P11)

Some interviewees described incidents of discrimination during training, recruitment, and in the early stages of a maritime job, recalling both explicit and implicit messaging that they may not be safe or welcome in the work environment:

"Physical dominance is a social hierarchy sort of thing. You kind of have to get through a hazing phase that is pretty rough on folks." (P1)

"I think that there's a perception that you need to be tough, loud, able to swear, and get in their faces to resolve issues on the waterfront." (P9)

"I've been made aware that when I've not been [there] they've had conversations about women working on boats and some of them being really skeptical. Like, 'What am I gonna do if she follows me down to the engine room and'...one of them actually used the phrase 'wants my seed.' You know? 'What if she wears yoga pants?' 'What if' this, 'what if' that." (P22)

Interviewees also described the cost and complexity of maritime training requirements, the disconnect between training and employment, and the increasing amount of capital needed to enter the industry, particularly in fisheries:

“They need to develop programs that lead to actual employment, which is a big deal. Because right now they have education programs that I’m aware of but that’s all they do. They don’t necessarily take you into an actual job or job opportunity.” (P17)

“It’s been a challenge to get employers to provide internships even if they don’t have to pay...there’s the disconnect between these educational experiences and these more work based experiences.” (P4)

“If you want to go to sea, the first barrier is the cost of acquiring the credentials. And that’s approximately \$1500 just to look for a job. And that’s the credential, the TWIC [Transportation Worker Identification Credential] card, the basic safety training, physical, all those things you need.” (P13)

“There are people who started in the industry a long time ago, white men who continued in the industry, grew older, built capital, and built businesses and now, as the work is expanding to other people or as they’re aging out of the industry there’s a challenge for people who don’t have the financial capacity to get into the business. That definitely limits minority groups.” (P16)

At the access stage of maritime employment, the indistinctness of the term “maritime,” together with the challenge of navigating and funding the credential requirements, may prevent interested and capable candidates from moving forward in the process. Interviews also revealed that the “face” of the industry, which is largely agreed to be that of a white male, discourages diverse populations from pursuing maritime careers. This may be subconscious, as described by women who never envisioned themselves in maritime careers because they had never seen women in them, or it may be interpreted as intentional messaging that women and people of color are neither suited nor welcome in the industry. Here interviewees also emphasized the importance of the approach used to connect with diverse communities, noting that partnerships should be tailored to the characteristics, history, and contributions to maritime of each community.

Retention

After discussing access, interviewees were again prompted to imagine that public awareness and access were no longer barriers. They were then asked to describe barriers that might still prevent a woman, person of color, or otherwise underrepresented person from staying in a maritime career long-term.

Interviewees familiar with living and working at sea described the harsh working conditions, requirements for worker success, and effects the work can have on early career mariners from all backgrounds:

"If I'm on a ship for four months, every day is Monday, every day is Friday. It's no break...you have to [have] wherewithal to really be able to put in a 12-hour day and then to be able to take care of yourself and then do it again." (P12)

"I would have huge second thoughts about being on a fishing vessel because I know now the level of effort and hard work that goes in to that craft." (P15)

Spending extended periods of time at sea in confined spaces is a unique aspect of some maritime subsectors, and interviewees generally agreed that underway working conditions prevent many people from pursuing maritime careers. However, some interviewees described magnified challenges underrepresented groups face when they do take on maritime work at sea:

"When you think about the intensity of the whiteness of the fishing industry...if you're a puller or whatever on one of those boats and you're an African-American or a Native American or an Asian...it's a miserable experience because of the level of consciousness of the people that are around you in this tight, really tense, highly stressful, no sleep kind of situation." (P17)

"But especially when you went out deep sea, people think because you're female, oh you must like them if you're talking to them. So there's a little of that, being in a confined area with no females. There were many vessels that I went on that didn't have even one [other] female and you just had to be very clear. Where a male doesn't need to be clear about not wanting to get hit on, I had to be clear right out of the gate. And if you didn't, you could have some challenges." (P21)

"You know it's like a hostile environment...I'm noticing the few gay guys that do come back things aren't working out so well and they have a really hard time." (P13)

"That takes cultural awareness, otherwise they're getting thrown in there with no backup... They take a trip or two and they don't feel like they're safe, like they're valued, and they're gonna move to something else. And then you'll have employers going, 'We try, we just can't find them' when they're not doing the rest. The rest of the cultural development that's needed to not only say, 'You can apply if you'd like, but we want you to apply, we understand where you are coming from.' That's too touchy feely for the maritime industry." (P10)

Though time at sea presents unique challenges, interviewees described similar experiences in other maritime sectors as well:

"I think there's still an obstacle with respect to the culture on the waterfront. You can look at, for example, those [Muslim] truck drivers, the drayage drivers, and the conflicts they've had with longshore workers locking them out of bathrooms. Not wanting them to be able to use the same restrooms." (P9)

*"I think part of it is when you are one of a few in an organization, there's this real cultural divide."
(P8)*

*"At the shipyard that we visited, [there were] calendars and posters of women on the wall...there's definitely that male, macho, sexist culture where things that may have been acceptable in the past, if you're trying to diversify or bring people into the workforce you could hire somebody but if they go to work and that's what they see then you're not gonna retain those people."
(P4)*

*"I fought my, you can't believe how hard, for my entire career, to be taken seriously, to not have my opinions under-considered, to not be left out of opportunities for me to learn. It was ridiculous the things I had to teach myself how to do when I every day saw other people, the same journeymen teaching white men how to do them."
(P17)*

Some interviewees, particularly women, remarked on the complications presented by maintaining a career in maritime and having children:

*"There's an innate thing for women: if they choose to have kids they're going to stop sailing. To get these long-term mariners in the system, how do we do that? I don't even know what that looks like."
(P18)*

*"Well how do I have a family? If I give this job up I lose this job. Also the Coast Guard holds me to medical requirements and so if I'm unfit for duty for the period of time that I'm pregnant or at least I'm in the risky part of the pregnancy and my doctor doesn't recommend it, is the Coast Guard going to take my license away? So there's this fear of losing your license and also how are we going to sustain as a family if the traditional role is that the female stays home at least for a portion of that? So that's why you don't see a lot of females out there."
(P21)*

In the retention phase of a maritime career, interviewees described various instances in which they experienced or witnessed hostile or aggressive behavior or harassment, including the use of racial slurs and jokes, unwanted sexual advances, and having access to facilities or tools blocked by other workers. Work-life balance, especially for women who have or want children, was also a factor. Here the "add women and stir" approach is again a useful reference, as this suggests that recruiting programs targeting diversity may place maritime workers into hostile, unsustainable situations.

Perceptions of diversity and inclusion initiatives

Interviewees were asked to share their perceptions, both positive and negative, of current or former initiatives they were aware of targeting diversity and inclusion in the maritime industry. Some interviewees specifically mentioned groups or strategies that they considered to be best practices in the area of social justice, while others provided general critiques, cautionary remarks, and recommendations based on experience with social justice initiatives.

For example, some interviewees believed that the maritime industry is interested in diversity and inclusion not because of shifting values towards social justice but because of the anticipated labor shortage:

“If it wasn’t the thing to do right now to have a diversity and inclusion policy I don’t think people would care. I think it’s more driven that the trades, no matter what it is in the maritime industry, need bodies...They need skilled workers.” (P18)

“I don’t know that they’re ready because those organizations are still largely made up of people that, unless confronted with a job shortage, I don’t know that they would be open to diversifying their workforce.” (P12)

Regarding best practices and cautionary messages for social justice initiatives, some interviewees emphasized the need for thoughtful, intentional action to increase diversity and inclusion. Regarding the recruitment of youth from underrepresented groups, some interviewees highlighted the importance of doing outreach for a range of maritime opportunities:

“Don’t just tell young kids of color about jobs [like] maritime manufacturing. Talk about all the other aspects of maritime. What about the science and some of the professional areas?...Because really, you’re going to create this, it already is in many ways, but this very segregated by skill level and wages and educational level” (P8)

“There’s this phenomenal failure of imagination about what women and people of color can do because people in the industry don’t challenge themselves to think more broadly than what they themselves have witnessed. I mean, you know, they’re a bunch of white guys who’ve seen a bunch of white guys who expect to see a bunch of white guys. It doesn’t occur to them.” (P17)

Interestingly, interviewees were divided on whether the internal culture of maritime should be targeted in diversity and inclusion efforts. Some interviewees suggested that the nature of maritime work requires a type of worker who can withstand unpleasant physical and social conditions. These interviewees tended to place the responsibility of career success on an individual as opposed to leaders or the industry as a whole, and often noted the need for “trailblazers” who were willing to pave the way for others. On the other hand, some interviewees viewed the physical demands of maritime work as independent from the social environment and tended to believe that leaders have equal responsibility in transforming maritime culture into an inclusive one. One interviewee summarized this position:

“Thick skin should only be applied to the ability to do the job, not the work environment.” (P20)

This divide is of particular interest in the context of an anticipated labor shortage. If the maritime industry needs to recruit new workers who are not currently familiar with maritime, there is impetus to address retention deficits to ensure that newly recruited workers choose to stay within the industry. If, instead, new

workers are recruited into hostile environments and expected to adapt to industry culture, it is reasonable to assume that some of those new recruits will not be retained.

Regarding initiatives that were perceived as having been successful, some interviewees specifically highlighted Washington State Ferries as an employer visibly dedicated to promoting diversity and retention. Some specific programs mentioned were a “bring your infant to work” option, flexible work schedules and telework options, and access to previous role and seniority after taking leave. Notably, these examples mostly target the removal of barriers for women and people with family obligations, and not necessarily people of color.

5. Discussion and Recommendations

5.1 Leveraging changing demographics in the wave of the “silver tsunami”

The demographic composition of the United States is consistently changing. All baby boomers will reach retirement age by 2030, and migration will outpace births as a contributor to population growth by 2030. The Two or More Races category will be the fastest growing over the next few decades, and less than half of U.S. children will be non-Hispanic white alone by 2020 (U.S. Census Bureau, 2018). Taken together, the historical and projected demographic trends and interview responses in this paper illustrate that there is room for improvement in maritime industry leaders’ efforts towards adapting to changing demographics and promoting diversity and inclusion within the workforce. Yet as the landscape of American demographics shifts, maritime industry leaders will have to keep pace to avoid a labor shortage. Unlike some industries, the urgency with which maritime decision-makers must adapt to changing labor demographics is heightened because of the economic importance of maritime activity and because some of the roles that are unique to maritime environments, such as seagoing roles, can be especially difficult to recruit for even without the added barriers faced by underrepresented communities.

As evidenced by the disparate fields from which diversity and inclusion literature has arisen, one of the challenges of executing a successful diversity and inclusion program is applying and adapting best practices from various fields to a local context. (Progoulaki & Theotokas, 2016; Shore et al., 2009; Stevens, Plaut, & Sanchez-Burks, 2008). However, when experts are consulted, context is carefully considered, and evidence-based best practices for increasing diversity and inclusion are utilized, diversity in the workplace has contributed to increased innovation, customer satisfaction, and higher returns, signaling a clear business justification for diversity and inclusion programs (Hewlett et al., 2013; McKinsey & Company, Pivotal Ventures, 2018; Morgan Stanley, 2017). Sturm (2006) contributed to our knowledge of best practices with a comprehensive analysis of a diversity and inclusion initiative at the University of Michigan, highlighting the use of organizational catalysts, intermediaries who can push diversity initiatives forward, and engagement with legal counsel to foster creative problem solving. In corporate settings, recent research has focused on lessons from change management, as well as the use of behavioral economics and social psychology to understand how bias impacts workplace decision-making in the context of diversity and inclusion initiatives (Dobbin & Kalev, 2007; Hewlett et al., 2013; Hunt et al., 2015). Still, though these methods were successful in their respective contexts and provide models for potential approaches, diversity and inclusion initiatives are best used when tailored to local dynamics.

It is clear from the literature and data presented in this research that, while maritime industry leaders are justified in their concern about an impending labor shortage, they should also recognize that this is occurring at a pivotal moment in maritime and U.S. history where the need for more workers is converging with growing public support and demand for incorporation of diversity and inclusion principles into workforce management. At the same time, it is crucial for maritime industry leaders to recognize that mechanisms matter and that there is no single strategy or end point that results in an objectively diverse and inclusive workforce. Rather, as Progoulaki & Theotokas (2016) noted, prioritization of diversity and inclusion is a perpetually unfinished process rather than a final product; in other words, the industry as a whole stands to benefit when decision-makers are committed to ongoing learning and engagement with diversity and inclusion initiatives. Given the extensive time required to select, invest in, implement,

monitor, evaluate, and adapt diversity and inclusion approaches, it is critical that industry leaders begin the process of incorporating diversity and inclusion priorities into strategic plans sooner rather than later.

Based on the results of this research, Washington maritime leaders should give special consideration to the maritime pipeline in their design and implementation of diversity and inclusion initiatives. Creating awareness through branding and education, removing access barriers, and increasing retention are parallel imperatives that must be addressed simultaneously for the maritime workforce to sustain itself. More specifically, education and outreach should consider all ages, ranging from children's books featuring diverse maritime characters, to formal incorporation in K-12 curriculum, to maritime representation in career fairs and youth programs. Removing access barriers should consider streamlining of credential acquisition, strategizing by policy makers and fishery councils to address the increasing burden of capital required for entry, and establishing intentional partnerships with communities throughout Washington to understand the strengths they bring to the industry as well as the history they have already contributed. Efforts to increase retention should include ongoing, up-to-date diversity training and monitoring that is driven by strong leadership and reinforced by policies that communicate the commitment of industry decision-makers to move the maritime industry in a more inclusive direction. Additionally, maritime industry leaders must invest in more thorough demographic data collection within the maritime workforce, as identification of trends is crucial to evaluating progress and adapting approaches.

5.2 Washington Maritime Blue as a Blue Economy beacon

The extent to which WMB leaders prioritize addressing structural inequities through implementation of their strategic plan also has implications for the global BE movement. As maritime stakeholders from all sectors grapple with what BE does and does not mean, some have cautioned against conceptual detachment from its origins in considerations of social justice and the equitable distribution of maritime benefits (Bennett, 2018; Hadjimichael, 2018; Voyer & van Leeuwen, 2019). Sturm (2006), writing about universities, suggests that diversity and inclusion initiatives provide a foundation for every person to enjoy "institutional citizenship". Sturm frames universities as "gatekeepers to economic and social opportunity" (p 324). From this perspective, the Washington maritime industry is similarly a vessel for realization of institutional citizenship in Washington, as it provides one setting for Washingtonians to participate in decision-making regarding public natural marine resources, the benefits to which all are equally entitled. Much like the maritime industry and the "silver tsunami", the BE concept is reaching a pivotal moment in which the emerging marine activities that bear its name will determine whether it evolves into a new era for socially equitable marine development or dissolves into the sea of marine governance buzzwords that never lived up to their transformative potential. WMB, therefore, has an opportunity to shape not only the trajectory of the Washington maritime industry, but also to stake its claim as an early adopter of the founding principles of the BE by prioritizing the equitable distribution of maritime benefits within the Washington context.

6. Conclusion

The Blue Economy movement is gaining global traction among marine resource stakeholders, but the concept has not been consistently defined and emerging initiatives are therefore inconsistent in their adherence to one of the core founding BE principles of advancing social equity. Beyond maritime settings, social inequity is increasingly addressed through diversity and inclusion initiatives aimed at increasing representation of women, people of color, and other underrepresented groups. Washington Maritime Blue, a strategic planning initiative tasked with accelerating growth of the Washington maritime industry, provides an informative example of how synergies between the BE concept and principles of diversity and inclusion can be used to advance the equity goals of the BE and address local inequities with regards to race and gender. Through observations from WMB meetings, analysis of demographic and wage data, and stakeholder interviews, I have demonstrated that Washington maritime leaders have opportunities to improve efforts towards shaping the BE discourse and improving diversity and inclusion throughout the maritime career pipeline. Additionally, I have pointed to examples in the literature in which

for-profit institutions have demonstrated a business justification for prioritization of diversity and inclusion and suggest similar benefits may be realized in the Washington maritime industry as well. Through targeted efforts to address race- and gender-based inequities in employment in the Washington maritime industry, WMB leaders have an opportunity to position themselves at the forefront of the BE movement and advance social justice in the state of Washington.

References

- Atlas.ti (Version 8). (2019). Retrieved from http://downloads.atlasti.com/docs/manual/atlasti_v8_manual_en.pdf?_ga=2.177711584.496826270.1560197360-577740293.1560197360
- Bennett, Nathan J. (2018). Navigating a just and inclusive path towards sustainable oceans. *Marine Policy*, 97, 139–146. <https://doi.org/10.1016/j.marpol.2018.06.001>
- Bennett, Nathan J., Govan, H., & Satterfield, T. (2015). Ocean grabbing. *Marine Policy*, 57, 61–68. <https://doi.org/10.1016/j.marpol.2015.03.026>
- Boxer, M. J. (1982). For and about Women: The Theory and Practice of Women's Studies in the United States. *Signs*, 7(3), 661–695.
- Clark Blickenstaff, J. (2005). Women and science careers: leaky pipeline or gender filter? *Gender and Education*, 17(4), 369–386. <https://doi.org/10.1080/09540250500145072>
- Community Attributes Inc. (2017). *Washington State Maritime Sector Economic Impact Study*. Retrieved from <https://www.maritimefederation.com/studies.html>
- Cussins, B. (2018, June 11). Iconic maritime industry facing workforce shortage, uncertain future. *Association of Washington Business*. Retrieved from <https://www.awb.org/olympia-business-watch/?bid=19826>
- Davis, R. S. (2016, Winter). Washington's Working Waterfronts. *Washington Business*. Retrieved from <https://view.joomag.com/washington-business-winter-2016/0477434001450119747/p30?short>
- Department of Commerce. (2017, December 11). Charting Washington state's course to be nation's most sustainable maritime industry by 2050. Retrieved November 18, 2018, from Washington State Department of Commerce website: <https://www.commerce.wa.gov/news-releases/charting-washington-states-course-nations-sustainable-maritime-industry-2050/>
- Dharmapuri, S. (2011). Just add women and stir? *Parameters*, 41(1), 56.
- Dobbin, F., & Kalev, A. (2007). The Architecture of Inclusion: Evidence from Corporate Diversity Programs. *Harvard Journal of Law & Gender*, 30(2), 279–301.
- Eikeset, A. M., Mazzarella, A. B., Davíðsdóttir, B., Klinger, D. H., Levin, S. A., Rovenskaya, E., & Stenseth, N. Chr. (2018). What is blue growth? The semantics of "Sustainable Development" of marine environments. *Marine Policy*, 87, 177–179. <https://doi.org/10.1016/j.marpol.2017.10.019>
- Executive Office of the President, Office of Management and Budget. (2017). *North American Industry Classification System*. Retrieved from https://www.census.gov/eos/www/naics/2017NAICS/2017_NAICS_Manual.pdf
- Frank, D. (1994). Race Relations and the Seattle Labor Movement, 1915-1929. *The Pacific Northwest Quarterly*, 86(1), 35–44.
- Friday, C. (1994). *Organizing Asian American labor: the Pacific Coast canned-salmon industry, 1870-1942*. Philadelphia: Temple University Press.
- Galetta, A. (2003). *Mastering the Semi-Structured Interview and Beyond*. New York University Press.
- Given, L. (2008). *The SAGE Encyclopedia of Qualitative Research Methods*. <https://doi.org/10.4135/9781412963909>
- Greenstone, S. (2017, August 14). Washington state maritime labor headed for a retirement cliff. *The Seattle Times*. Retrieved from <https://www.seattletimes.com/seattle-news/maritime-labor-headed-for-a-retirement-cliff/>
- Hadjimichael, M. (2018). A call for a blue degrowth: Unravelling the European Union's fisheries and maritime policies. *Marine Policy*, 94, 158–164. <https://doi.org/10.1016/j.marpol.2018.05.007>
- Herring, C. (2009). Does Diversity Pay?: Race, Gender, and the Business Case for Diversity. *American Sociological Review*, 74(2), 208–224. <https://doi.org/10.1177/000312240907400203>

- Hewlett, S. A., Marshall, M., & Sherbin, L. (2013, December 1). How Diversity Can Drive Innovation. *Harvard Business Review*, (December 2013). Retrieved from <https://hbr.org/2013/12/how-diversity-can-drive-innovation>
- Hunt, V., Layton, D., & Prince, S. (2015). *Diversity Matters*. Retrieved from McKinsey & Company website: <https://www.mckinsey.com/~media/mckinsey/business%20functions/organization/our%20insights/why%20diversity%20matters/diversity%20matters.ashx>
- International Transport Workers Federation. (2016, May 3). Women Seafarers [Text]. Retrieved April 28, 2019, from International Transport Workers Federation website: <https://www.itfseafarers.org/ITI-women-seafarers.cfm>
- Joshi, A., & Roh, H. (2009). The Role of Context in Work Team Diversity Research: A Meta-Analytic Review. *The Academy of Management Journal*, 52(3), 599–627.
- Larrowe, C. P. (1970). The Great Maritime Strike of '34. *Labor History*, 11(4), 403. Retrieved from bth.
- Leech, B. L. (2002). Asking Questions: Techniques for Semistructured Interviews. *PS: Political Science & Politics*, 35(4), 665–668.
- Longitudinal Employer-Household Dynamics*. (n.d.). Retrieved from <https://qwexplorer.ces.census.gov/static/explore.html#x=0&g=0>
- Longshore Workers and Their Unions. (n.d.). Retrieved June 10, 2019, from http://depts.washington.edu/dock/longshore_intro.shtml
- MacNeil, A., & Ghosh, S. (2017). Gender imbalance in the maritime industry: impediments, initiatives and recommendations. *Australian Journal of Maritime and Ocean Affairs; Abingdon*, 9(1), 42–55. <http://dx.doi.org/10.1080/18366503.2016.1271262>
- McKinsey & Company, Pivotal Ventures. (2018). *Rebooting Representation: Using CSR and philanthropy to close the gender gap in tech*. Retrieved from <https://www.rebootrepresentation.org/>
- Morgan Stanley. (2017). *An Investor's Guide to Gender Diversity*. Retrieved from <https://www.morganstanley.com/ideas/gender-diversity-investor-guide>
- Mulazzani, L., & Malorgio, G. (2017). Blue growth and ecosystem services. *Marine Policy*, 85, 17–24. <https://doi.org/10.1016/j.marpol.2017.08.006>
- Nair, N., & Vohra, N. (2015). *Diversity and Inclusion at the Workplace: A Review of Research and Perspectives* [Working Paper]. Retrieved from Indian Institute of Management Ahmedabad website: <http://vsilir.iima.ac.in:8080/xmlui/handle/11718/16616>
- Older People Projected to Outnumber Children. (2018, March 13). Retrieved May 18, 2019, from The United States Census Bureau website: <https://www.census.gov/newsroom/press-releases/2018/cb18-41-population-projections.html>
- Palys, T. (2008). Purposive sampling. In L. Given (Ed.), *The SAGE Encyclopedia of Qualitative Research Methods* (Vol. 2, pp. 697–698). <https://doi.org/10.4135/9781412963909.n420>
- Pelled, L. H., Ledford, Jr., Gerald E., & Mohrman, S. A. (1999). Demographic Dissimilarity and Workplace Inclusion. *Journal of Management Studies*, 36(7), 1013–1031. <https://doi.org/10.1111/1467-6486.00168>
- Progoulaki, M., & Theotokas, I. (2016). Managing culturally diverse maritime human resources as a shipping company's core competency. *Maritime Policy & Management*, 43(7), 860–873. <https://doi.org/10.1080/03088839.2016.1173734>
- Reid, S. (2018, September). Unfinished Business: Creating a Sustainable Workforce Through Diversity and Inclusion. Retrieved November 18, 2018, from Morgan Stanley website: <https://www.morganstanley.com/articles/diversity-story-of-impact>
- Roberson, Q. M. (2006). Disentangling the Meanings of Diversity and Inclusion in Organizations. *Group & Organization Management*, 31(2), 212–236. <https://doi.org/10.1177/1059601104273064>
- Shore, L. M., Chung-Herrera, B. G., Dean, M. A., Ehrhart, K. H., Jung, D. I., Randel, A. E., & Singh, G. (2009). Diversity in organizations: Where are we now and where are we going? *Human Resource Management Review*, 19(2), 117–133. <https://doi.org/10.1016/j.hrmr.2008.10.004>
- Shore, L. M., Cleveland, J. N., & Sanchez, D. (2018). Inclusive workplaces: A review and model. *Human Resource Management Review*, 28(2), 176–189. <https://doi.org/10.1016/j.hrmr.2017.07.003>
- Silver, J. J., Gray, N. J., Campbell, L. M., Fairbanks, L. W., & Gruby, R. L. (2015). Blue Economy and Competing Discourses in International Oceans Governance. *The Journal of Environment & Development*, 24(2), 135–160. <https://doi.org/10.1177/1070496515580797>

- Stevens, F. G., Plaut, V. C., & Sanchez-Burks, J. (2008). Unlocking the Benefits of Diversity: All-Inclusive Multiculturalism and Positive Organizational Change. *The Journal of Applied Behavioral Science*, 44(1), 116–133. <https://doi.org/10.1177/0021886308314460>
- Sturm, S. (2006). The Architecture of Inclusion: Advancing Workplace Equity in Higher Education. *Harvard Journal of Law & Gender*, 29, 247.
- Tadros, M. (2010). Introduction: Quotas – Add Women and Stir? *IDS Bulletin*, 41(5), 1–10. <https://doi.org/10.1111/j.1759-5436.2010.00160.x>
- Thrush, C. (2006). City of the Changers: Indigenous People and the Transformation of Seattle's Watersheds. *Pacific Historical Review*, 75(1), 89–117.
- Tint, B. (2004). No Longer Just Add Women and Stir: An Integrated Approach to Gender, Peace, and Conflict. *Peace and Conflict: Journal of Peace Psychology*, 10(3), 301–304. https://doi.org/10.1207/s15327949pac1003_7
- United Nations Environment Programme. (2012). *Green economy in a blue world*. Retrieved from http://www.unep.org/pdf/Green_Economy_Blue_Full.pdf
- Valantine, H. A., & Collins, F. S. (2015). National Institutes of Health addresses the science of diversity. *Proceedings of the National Academy of Sciences*, 112(40), 12240–12242. <https://doi.org/10.1073/pnas.1515612112>
- Voyer, D. M., & van Leeuwen, D. J. (2019). 'Social license to operate' in the Blue Economy. *Resources Policy*, 62, 102–113. <https://doi.org/10.1016/j.resourpol.2019.02.020>
- Voyer, M., Quirk, G., McIlgorm, A., & Azmi, K. (2018). Shades of blue: what do competing interpretations of the Blue Economy mean for oceans governance? *Journal of Environmental Policy & Planning*, 20(5), 595–616. <https://doi.org/10.1080/1523908X.2018.1473153>
- Washington State Department of Commerce. (2016). *Proposed Strategic Plan for Washington State Maritime Sector, 2017 - 2019*. Retrieved from <http://www.commerce.wa.gov/wp-content/uploads/2017/01/Sector-Leads-Maritime-Strategy-2016.pdf>
- Waterfront Workers History Project. (n.d.). Retrieved April 28, 2019, from <http://depts.washington.edu/dock/index.shtml>
- Winslow, C. (Ed.). (1998). The "Lords of the Docks" Reconsidered: Race Relations among West Coast Longshoremen, 1933-61. In *Waterfront workers: new perspectives on race and class* (pp. 155–192). Urbana: University of Illinois Press.
- World Wildlife Fund Baltic Ecoregion Program. (2015). *Principles for a Sustainable Blue Economy*. Retrieved from http://d2ouvy59p0dg6k.cloudfront.net/downloads/15_1471_blue_economy_6_pages_final.pdf
- WSDOT - Washington State Ferries Our Fleet. (n.d.). Retrieved November 18, 2018, from <https://www.wsdot.wa.gov/Ferries/yourwsf/ourfleet/>