

Priority 4:

Diversity & Decision-Making for the Salish Sea

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Introduction

The Salish Sea is a culturally rich and diverse region, spanning two countries and thousands of miles, and home to over 7 million people across both rural and urban landscapes (Salish Sea Marine Sanctuary, 2018). As a coastal territory, connections with the sea and local natural resources are evident, with many communities economically and culturally tied to natural resource systems such as fisheries and timber. Thus, ecosystem functioning plays a major role in the wellbeing of local individuals and provides incentives to protect and support healthy ecosystems.

Unfortunately, all stakeholders and impacted parties are not equally represented in decision-making and environmental planning processes. Barriers to access for meetings and discussions (both physical and intangible), lack of representation in environmental scholarship and careers, and false stereotypes are among some of the many obstacles that prevent fully inclusive representation of all affected groups and individuals. While current efforts to include Traditional Ecological Knowledge (TEK), Black, Indigenous, and People of Color (BIPOC) voices, and diverse local opinions in decision-making have significantly increased in recent years, research shows that further action is necessary.

This non-exhaustive report details the currently represented knowledge systems in decision-making processes, barriers to inclusion, and suggestions for promoting greater diversity and inclusivity in future ecosystem recovery efforts. I utilized local literature whenever possible to ensure the most relevant information, supplementing with non-local sources when necessitated for a more comprehensive summary. The resulting report is limited in volume of literature reviewed but nonetheless provides crucial insight into current representation pathways and barriers in environmental planning.

Current Knowledge Systems

Effective ecosystem recovery efforts require diverse representation of viewpoints and values across affected communities and sectors, as well as supportive evidence from a variety of sources to ensure an informed, sustainable, and supported endeavor. Support and compliance of environmental regulations is vital to success, thus broad representation of stakeholder and Indigenous viewpoints throughout the decision-making and implementation process is essential. As ecosystem health contributes to human wellbeing in a plethora of forms, ecosystem recovery efforts should be inclusive of those most affected.

In a recent analysis of Canada's protected areas organizations, Lemieux et al. (2018) revealed that the vast majority of decision-making is based on internal evidence, such as institutional and staff knowledge, with very little representation of Indigenous knowledge bases or peer-reviewed resources. Furthermore, when surveyed the majority participants perceived staff knowledge and institutional knowledge as valuable or very valuable (98% and 88% respectively), with a much smaller percentage extending the same confidence to grey literature

(52%), or Indigenous knowledge (68%; Lemieux et al., 2018). Demographic differences were clear, with women clearly valuing Indigenous knowledge over men, higher-educated individuals showing higher levels of support for peer-reviewed or grey literature, and years of work experience negatively correlating with perceived value of Indigenous knowledge (Lemieux et al., 2018). Legislation and policy, staff assessments and institutional knowledge were reported by far as the most utilized in decision-making, with Indigenous knowledge and international agreements being used “occasionally” (80%) or “never” (71%) in management decisions (Lemieux et al., 2018).

Demographic analysis of regional environmental risk planning (flood risk management) meetings in the mid-Atlantic region of the U.S. show similar patterns of underrepresentation, with most attendees identifying as English-only speaking, educated, higher-income, and predominantly over the age of 64 (Olsen et al., 2018). These statistics show strikingly isolated demographic representation from overall community variance, with study participants being much older, higher educated and higher earning, and more likely to own a home than the general population (Olsen et al., 2018). While the U.S. Census Bureau indicates that 21% of the population (or 1 in 5) U.S. residents speak a different primary language than English, the study results suggest that these groups were absent or largely underrepresented in meetings (Olsen et al., 2018).

In Leach et al.’s (2002) paper, the authors analyze collaborative planning in Washington and California watershed stakeholder partnerships, which they distinguish from stakeholder coalitions and advocacy groups who start with a united goal. Instead, these diverse groups which are often comprised of local landowners and citizens, advocacy groups, government entities,

elected officials, and businesses, gather publicly to debate public policy from different starting points, end goals, and points of view (Leach et al., 2002). The overwhelming majority of those interviewed (156 out of 157) agreed that their partnership was inclusive and had not purposefully excluded any stakeholder from participation, despite some stakeholders choosing to not attend meetings (Leach et al., 2002). Most partnerships (93%) reviewed utilized consensus-based decision-making with 82% of this group using informed consent basis (allowing vetoing of decisions; Leach et al., 2002).

Despite the positive perceptions of inclusivity throughout the process, around 28% of stakeholders stated that there were frequent disagreements between experts (scientists, engineers) and laypeople without technical knowledge due to technical language barriers and lack of advanced knowledge on the subject (Leach et al., 2002). These disagreements as for the sources and extent of issues can lead to standstills in the decision-making process (Leach et al., 2002). The length of the partnership was positively associated with the rate of agreement, suggesting that the process of stakeholder collaboration and interaction strengthens individual ability to understand different perspectives and be open to new approaches (Leach et al., 2002).

Barriers to Inclusive Representation

In a 2018 study, a large proportion of the U.S. population indicated an incorrect belief that non-white and low-income Americans have a lower-level of environmental concern than white, higher-earning Americans (Pearson et al., 2018). Respondents included members of minority and low-income groups who underestimated the levels of concern of their own social groups (Pearson et al., 2018). Furthermore, the term “environmentalists” was associated with

white, young, educated individuals across all respondent groups (Pearson et al., 2018). In addition to being the most impacted and most vulnerable groups due largely to discriminatory zoning and environmental inequities, ethnic and racial minorities groups report the highest levels of concern regarding climate change impacts and their communities independent of political affiliation, gender, income level, and level of education (Pearson et al., 2018).

As Americans tend to rely heavily on social norms for behavioral drivers, with low-income groups tending to be particularly sensitive to outside opinion, stereotypes are often a large influencer in situations where outside resources (such as personal experience) are absent (Pearson et al., 2018). These stereotypes can drive level of environmentalist behaviors such as avoiding littering and using water and energy saving techniques when perceived as common conduct (Pearson et al., 2018). Alternatively, the perception of “environmentalists” as ill-natured and eccentric is negatively associated with sustainable behavior (Pearson et al., 2018). The level of concern associated with one’s social group is therefore highly correlated with personal level of environmental action as individuals may feel like their beliefs do not coincide with that of their communities (Pearson et al., 2018). Furthermore, if policymakers and environmental organizations feel these groups are unconcerned with climate change and environmental health, it can create barriers to inclusion in decision-making efforts (Pearson et al., 2018).

Due to historical segregation, discriminatory zoning practices and land use regulations, and biased policy making, many communities identifying as BIPOC continue to experience loss of land ownership and disproportionate exposure to environmental toxic waste sites (King, 2020). Being excluded from land rights creates barriers to participating in the decision-making process, including decisions such as where these structures are located (King, 2020). King

(2020) demonstrates that these practices are the result of U.S. capitalism in which profit is always placed above sustainability and equality. Quick and high-yield methods of extraction lead to high quantities of externalities which are forced upon historically segregated communities, revealing that environmental injustice is very much alive today (King, 2020).

These social inequalities are substantiated in a recent article by Schell et al. (2020) in which the authors explain that systematic racism and classism extend to ecological aspects. A theory referred to as the “luxury effect” infers that wealthier households with increased room for elective expenditures tend to spend more money on personal gardens and greenspaces, thus contributing to an urban mosaic of vegetation (Schell et al., 2020). The extra income and leisure time associated with this wealth contributes to greener lawns and greater diversity of plants and trees in wealthier neighborhoods (Schell et al., 2020). This is compounded by the unequal distribution and size of public greenspaces in U.S. metropolitan regions which appears to be correlated with home ownership, income, education level, and racial composition (Schell, 2020). Other studies suggest that these effects encompass levels of animal biodiversity, with wealthier neighborhood parks exhibiting larger number of bird species (Schell et al., 2020).

Well-documented effects of environmental injustice include disproportionate exposure to pollutants (air and water) and environmental hazards which are predominantly located near low-income, or predominantly racial and ethnic minority and Indigenous communities (Schell et al., 2020). Urban heat islands are also associated with low-income and minority neighborhoods, likely resulting from less vegetative and tree cover -as well as higher levels of impermeable surfaces (e.g., concrete, asphalt; Schell et al., 2020). Together, these disparities make low-

income communities more at-risk for heat- and pollution-related illnesses than wealthier neighborhoods (Schell et al., 2020).

These inequalities exist in large part due to historical structural racism through policy, such as “redlining” which occurred between 1933-1968 to limit the wealth capacity of Black Americans (Schell et al., 2020). Neighborhoods were graded by levels ranging from desirable (grade A) to hazardous (grade D) and housing loans strictly reserved for white Americans as a form of racial segregation, with lingering effects to this day (Schell et al., 2020). Today, neighborhoods graded as “hazardous” have about 21% fewer tree cover, while “desirable” neighborhoods have much higher levels of greenspaces (Schell et al., 2020). These effects correspond with biodiversity, with species richness negatively correlated with lower tree and vegetative cover and higher level of impervious surfaces (which limit the movement of organisms and gene flow; Schell et al., 2020).

While legislation such as Clinton’s 1994 Executive Order 12898, have attempted to address these inequalities, individual states are left to create their own policies and goals for environmental justice (King, 2020). This lack of congruity and absence of judicial authority makes it difficult to obtain funding for policies and programs implemented at the state level (King, 2020). In 2014, Portland, Oregon made changes to its land use planning program in an attempt to improve public participation, but there has been little involvement from local governments (King, 2020). Additionally, there is very limited funding, policies are indistinct, and methods of participation (e.g., public hearings) are lacking (King, 2020).

King (2020) argues that this lack of structural support creates barriers to purposeful low-income BIPOC participation. As in the case of watershed partnerships, the use of technical

language excludes the general public from understanding, and thus participating in, discussions that impact their communities (King, 2020). Additionally, communication barriers due to different dominant languages fuel feelings of exclusion from the conversation (King, 2020). While BIPOC and low-income communities are often the most affected by environmental changes, these communities are often underrepresented in decision-making positions (King, 2020). Instead, the majority of advocates are white, highly educated and middle-class, lacking the diversity and familiarity to encourage participation from diverse communities (King, 2020). If individuals do not see other members of their community that they recognize and trust, they are less likely to feel comfortable in participating (King, 2020). This can also drive a culture of white, middle-upper class academia lacking in forms of engagement and communication styles, disability awareness, and acknowledgement of different cultures (King, 2020).

In the Pacific Northwest, historical displacement and mistreatment of BIPOC communities can also fuel feelings of distrust in the decision-making process (King, 2020). Environmental policies such as zoning and land management acts perpetuate these inequalities, emphasizing the need for community engagement and institutional changes (King, 2020). Lastly, logistical barriers including location, transportation, childcare resources, inability to take time off work, and lack of timely notice prove as barriers to meeting attendance (King, 2020). King (2020) adds that public policy is driven by dominant cultures despite its name which implies inclusion of all, only permitting for certain manners of participation among certain groups. Meaningful participation from BIPOC communities requires increased structural support to improve access, involvement, and trust.

Similarly, Olsen et al. (2018) suggest the lack of diverse participants in environmental planning meetings could be explained by barriers including English-only communication (language barriers), differing cultural norms, and logistical barriers (e.g., access to childcare, inability to miss work, lack of transportation). Other influences could include differing social statuses (thus fueling a sense of lack of belonging), and age (Olsen et al., 2018). Older age is often associated with lower general health and less mobility, while younger individuals may either be uninterested or unbothered by climate change impacts (Olsen et al., 2018). Furthermore, those in the middle age range (18-44) are the most likely to be primary caregivers of young children or not be in a position in their career where they have flexible work schedules (Olsen et al., 2018).

In the case of knowledge system representation in Canada's protected areas sector, Lemieux et al. (2018) indicate that despite financial limitations, managers have free domain to utilize the information they favor in decision-making. Identified barriers to evidence-based support reported by managers included financial (79%), lack of time (73%), absence of monitoring programs (70%), limited staff (71%), and lack of agreement between decision-makers and researchers (65%; Lemieux et al., 2018). While the vast majority of managers (85%) reported that they trust and understand diverse evidence sources, this appears to have no influence on the purported value of said evidence in decision-making scenarios (Lemieux et al., 2018). Additionally, Lemieux et al. (2018) add that the sector lacks a standard or set of norms which direct one to utilize diverse sources and forms of evidence.

Promoting Inclusivity

As minority communities continue to face disproportionate exposure to environmental hazards, the Environmental Protection Agency (EPA) has advocated for local community based environmental participation (CBEP) practices, but these efforts are rarely directed toward low-income BIPOC communities (King, 2020). Structural components such as policies should be rewritten to clearly emphasize the importance of BIPOC involvement in decisions that affect their communities, while avenues for participation should be increased. Rather than making BIPOC involvement a formality, organizations need to prioritize accessibility by removing barriers and involve communities throughout the entire process instead of treating input as an afterthought. By involving people from the initiation of a project there is a greater ability to influence and contribute to a decision that benefits those communities.

Efforts should be made to increase diversity and engagement at state and city level meetings to promote a more open and welcoming atmosphere. This includes emphasizing different communication styles (e.g., verbal versus solely written language, the latter of which can be correlated with white supremacy culture), accommodating for organizational barriers by providing ample notice for meeting times, and considering transportation logistics for those with disabilities or lack of access to personal vehicles (King, 2020). The latter could include centralizing a meeting place within walking distance of main bus lines, providing resources for carpooling, and accommodating for wheelchair access. Furthermore, if funding allows, compensation for time could greatly increase meeting attendance. King (2020) adds that utilizing approachable terminology is vital for community involvement, as most non-specialists

lack the vocabulary and expertise to understand important conversations that involve their communities.

Olsen et al. (2018) emphasize the importance of organizing meetings throughout communities within a region to make attending accessible to diverse demographics, rather than only those conveniently located. Furthermore, if logistically feasible, remote meetings have become increasingly popular in recent years and could greatly increase meeting accessibility for wide range of demographics. As one in five U.S. residents speak a non-English language at home, access to translators and the use of multi-language advertising for meetings could greatly increase participation from these groups (Olsen et al., 2018).

To increase the utilization of diverse forms of evidence in decision-making, Lemieux et al. (2018) suggest for a more transparent management results reporting system, potentially through the use of indicators. Regarded as traditionally poor communicators of data and research, conservation organizations could benefit from increased knowledge-sharing and correspondence (Lemieux et al., 2018). As co-management efforts with Indigenous Canadian peoples increases to meet land conservation goals, there is a chance that greater interaction will lead to increased understanding and valuing of Traditional knowledge sources, and thus a greater representation in evidence for management decisions (Lemieux et al., 2018).

Racial and ethnic minorities continue to be greatly underrepresented in environmental decision-making bodies and science higher-education, thus substantially limiting their ability to contribute to key environmental decisions (Pearson et al., 2018; Crowley et al., 2004). Representing nearly 40% of the U.S. population, minorities account for only 12% of environmental organizations (both governmental and nongovernmental; Pearson et al., 2018).

Furthermore, in 1997 just over 75% of doctorates in science and engineering were awarded to white students, while minority (self-identifying as Black, Hispanic, or Native American/Alaskan American) students received just over 7% of these degrees (Crowley et al., 2004). Crowley et al. (2004) suggest that social climate may be a large driver in this underrepresentation, referencing four key variables: psychological (attitudes, perceptions as related to race or ethnicity), behavioral (level of involvement and social interactions), structural diversity (diversity of staff and students), and historical institutional associations (segregation, desegregation, institutional policies). Crowley et al. (2004) suggest that each of these variables must be acknowledged to improve academic climate and encourage greater inclusion of underrepresented groups.

Conclusion

Representing a diverse array of viewpoints, cultures, and values from stakeholders, resource users, Indigenous Nations, and local communities in environmental decision-making is vital for social justice progress, as well as success at the implementation level. Inclusion of multiple forms of knowledge allows for the sharing of new ideas and forms of knowledge, the opportunity to voice opinions, and to protect spiritual and cultural property such as historical resources. Furthermore, it is one step forward in addressing health inequities among ethnic, racial, and low-income groups.

Studies show that the perception of inequality is negatively correlated with compliance to environmental legislation such as Marine Protected Areas (MPAs), and in some cases can cause the opposite of the intended effect (Jones et al., 2013). If one or more groups feels excluded from the decision-making process, it is likely that the impacts of such decisions will cause

negative impacts either economically, recreationally, spiritually, or culturally. In order for environmental recovery efforts to be effective, those affected need to feel these restrictions will positively benefit them in the long-term, thus access to participate in the process is vital to ensure all voices are heard and represented.

While literature is available on the benefits of representing a diverse range of stakeholders and users in environmental decision-making, there is an absence of studies in the Salish Sea region on actual demographic trends for involvement with organizations, meetings, and other decision-making processes. Understanding current representation would help to increase inclusion and remove barriers for those currently underrepresented. Additionally, I was unable to find any literature in regard to immigrant community representation in environmental decision-making. This appears to be a topic greatly lacking in research.

Future research should address these knowledge gaps through observation and social surveys to identify current represented knowledge systems in the Salish Sea, and if these groups feel they are currently represented meaningfully. Research should include meeting attendance and address barriers to attendance for all parties. Are these meetings centrally located and near public transportation, or are multiple meeting locations and times available to make them more accessible to those without transportation? Are translators present for those whose dominant language is not English? Are multiple forms of communication available (e.g., verbal, written)? Are there opportunities for all to voice questions, concerns, and comments? What could potentially increase community attendance and participation?

While there is literature on evidence utilization in Canadian environmental organizations, there is a lack of research on Puget Sound and Washington State organizations. Local analysis

should address the utilization rates of different forms of evidence such as Traditional Ecological Knowledge and peer-reviewed literature by local organizations and across levels of governance. Institutions and states should consider requiring minimum amounts of these forms of evidence in future environmental planning decisions via policy.

Pearson et al. (2018) suggest that stereotypes and misperceptions about a lack of environmental concerns from minority and low-income groups may be a driver behind the “attitude-action” gap in which 75% of Americans report a level of environmental concern, but only 1 in 5 makes efforts to address this concern. The stereotype of “environmentalists” as middle-class and white may discourage underrepresented groups from undertaking collective action (Pearson et al., 2018). Does using diverse representation of different races, ethnicities, and income-levels in environmental messaging influence participation in environmental professions and decision-making opportunities (Pearson et al., 2018)? Does it influence individual perceptions and attitudes towards the level of environmental concern of these groups? These topics should be prioritized in future research.

Diverse representation begins with removing cultural and institutional barriers to participation from historically underrepresented communities. Federal, state, and organizational bodies must reflect these values in their policies and make efforts to create open and trustworthy spaces for respectful communication and knowledge sharing. Successful ecosystem recovery and environmental management requires the inclusion and support of all affected.

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