

# **Equity and Environmental Justice in Fisheries Management Brief Overview**

A report to the Council Coordination Committee  
by an informal CCC and NOAA staff workgroup

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## Introduction

At its October 2021 meeting, the Council Coordination Committee (CCC) held a session on environmental justice (EJ) in fisheries management, during which NOAA Fisheries presented on national efforts and two Councils presented regional efforts to address EJ, challenges, and some of the steps being taken to address inequities.<sup>1</sup> Additionally, NOAA Fisheries presented the current steps the Agency is taking to address Executive Orders on equity and EJ (summarized below) and on discussions held with the staff leadership of each Regional Fishery Management Council and the three interstate Marine Fisheries Commissions to understand their current approaches to engaging underserved communities.

NOAA Fisheries posed the following discussion questions to the CCC to start an initial discussion on how to advance EJ in Federal fisheries management:

What ideas do you have for opportunities to advance environmental justice initiatives together?

- Can you identify barriers standing in the way?
- From the discussion today, are there opportunities to adapt similar efforts to your regions?

The CCC concluded that the issues associated with EJ, such as outreach to underserved communities, were too broad and complex to adequately address during a single CCC meeting and therefore advocated for a Council/NOAA Fisheries workshop prior to the May 2022 CCC meeting to evaluate, respond to, and inform equity and environmental justice (EEJ)<sup>2</sup> efforts. An informal workgroup composed of Council staff from each region and NOAA headquarters staff was subsequently formed to organize such a workshop.<sup>3</sup>

After some initial planning, the Executive Directors decided in January 2022 that the first step should be for this workgroup to develop a report for presentation at the May 2022 CCC meeting. They indicated that the report should “identify the ‘environmental justice in fisheries management’ problem from a national and regional perspective” and include “an initial discussion of what the Councils can do to address any problems from a Magnuson-Stevens Fishery Conservation and Management Act (MSA) perspective.” The Executive Directors’ guidance detailed further that the discussion should “identify where the MSA provides guidance, requirements, and standards related to EJ, identify existing efforts and specific actions the Councils can take” and “include impediments (e.g., regulations, lack of data) to those actions.”

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<sup>1</sup> The CCC’s October 2021 agenda, including the presentations on EJ in Fisheries management, can be found here: <https://www.fisheries.noaa.gov/event/2021-october-council-coordination-committee-meeting>

<sup>2</sup> While NOAA Fisheries’ discussion questions, and the CCC’s original guidance to the workgroup, were specific to EJ, the workgroup found it was challenging to rhetorically and conceptually draw a clear distinction between equity and EJ. The interrelated nature of equity and EJ is reflected in the Environmental Protection Agency’s definition for EJ and the definition for equity put forward in Executive Order 13985.

<sup>3</sup> An important caveat to the information provided in this initial report is that it is largely limited to the expertise and experience of the workgroup members. One exception is the WPFMC contributions which stem from several rounds of advisory body and council input as a part of their EEJ programmatic assessment and planning efforts. The working group has not assessed unfunded mandates/mechanisms nor rulemaking opportunities with respect to advancing EEJ.

The workgroup prepared this report in response to the CCC’s guidance. This report provides an opportunity for the CCC and NOAA to better understand and discuss EEJ in relation to the discussion questions that NOAA Fisheries posed at the October 2021 CCC meeting. The ideas and analyses herein are rooted in the guidance and requirements of the MSA and other relevant policy mandates (e.g., Executive Order 12898).

Below are definitions, drawn from Executive Orders or Federal policy, for several key terms frequently used throughout this report. These definitions are provided so readers have a common, shared understanding of these concepts. However, it is important to note that throughout the preparation of this report, the workgroup often revisited their meaning, particularly the terms ‘equity’ and ‘EJ.’ Broad concepts like equity and EJ are “slippery” in the sense that they are difficult to measure and context specific when put into practice (McDermott et al., 2013). Additionally, EEJ is multidimensional as there are distributional, procedural, and recognition considerations. In short, EEJ in the context of fisheries management is about fair allocations, meaningful representation within and across governance bodies including an awareness of the constraints to participation or representation, and the recognition and respect of various worldviews (Allison et al., 2012; Capistrano et al., 2012; Carothers et al., 2021; Donkersloot et al., 2021; McDermott et al., 2013; Schreckenber et al., 2016).

For these reasons, the workgroup tried to strike a balance in the report to provide information and reflections that are informative at both a national and regional level. For example, addressing EEJ in the North Pacific region necessitates being mindful of the 229 Tribes in Alaska in addition to hundreds of fishing-dependent communities; many of which are remote and depend on subsistence ways of life. The Western Pacific Region has the largest marine jurisdiction expanding 1.5 million square miles across three time zones and the international dateline. It includes one state (Hawai`i), two territories (American Samoa and Guam), one commonwealth (Commonwealth of the Northern Mariana Islands, CNMI), and several Pacific Remote Island Areas (Johnston, Wake, Jarvis, Howland/Baker, Palmyra, and Kingman Reef). More than 75% of the population identifies as Asian American, Native Hawaiian and Pacific Islander (AANHPI), Samoan, Chamorro, Refaluwasch, and Native Hawaiian.

### *Key Terms*

*“**Environmental Justice** is the fair treatment and meaningful involvement of all people, regardless of race color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.” — Environmental Protection Agency, Office of Policy, 2016*

*“**Equity means** the consistent and systematic fair, just, and impartial treatment of all individuals including individuals who belong to underserved communities that have been denied such treatment such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality.” – Executive Order 13985, Sec. 2*

**Underserved Communities** “The term underserved communities’ refers to populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life, as exemplified by the list in the preceding definition of ‘equity.’” - Executive Order 13985, Sec. 2.

**Disadvantaged Communities** Executive Order 14008 uses the phrase “disadvantaged communities” and describes them as “historically marginalized and overburdened” (Sec. 219). This term has been used in existing Federal and state programs to prioritize funding for environmental justice. The latest [OMB interim guidance](#) (7/21) provides an interim definition of community as “either a group of individuals living in geographic proximity to one another, or a geographically dispersed set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions.” With respect to applying the term disadvantaged to communities it recommends using “appropriate data, indices, and screening tools to determine whether a specific community is disadvantaged based on a combination of variables.” It then provides a lengthy list of examples of these variables and concludes by noting: “In determining which variables to consider, agencies should consider the statutory authority for covered programs. In addition to the above definition of disadvantaged communities, geographic areas within Tribal jurisdictions should be included.”

### **Environmental Justice as a Social Concern**

This section provides an overview of EJ as a matter of social concern and environmental policy. *Environmental justice*, as a term and as a social movement, gained national attention in 1982 when civil rights activists organized to stop the state of North Carolina from dumping 120 million pounds of contaminated soil with polychlorinated biphenyls in Warren County, which was predominantly African American (Bullard 1996, 2000). Warren County became the birthplace of a new environmental social movement that drew attention to the ways in which poor communities, and communities of color, were experiencing disproportionately negative environmental and health impacts (Mohai, Pellow, and Roberts 2009).

There is a substantial body of work documenting environmental inequalities across the United States (see Burch 1976; Bullard 1983; Chavis 1987; Bryant and Mohai 1992; Brulle and Pellow 2006) including a 1983 study conducted by the U.S. General Accounting Office (GAO) to evaluate the location of hazardous waste sites found toxic waste sites to be disproportionately located in African American communities across the south (GAO 1983). Decades of subsequent scholarship have produced a rich body of work on the causes of environmental risks and inequalities, much of which points to broader, intertwined racial, social, and economic forces that disadvantage some communities over others (Downey 2006; MacKenzie 2007; Schlosberg 2007; 2009; Walker 2012).

These broader forces that systematically disadvantage some communities and groups over others, particularly with respect to their environmental and ecological context, were addressed in the comprehensive statement of [17 Principles of Environmental Justice](#), which were adopted by the first National People of Color Environmental Leadership Summit in 1991 (Appendix 1). This Summit brought together 1,100 attendees from all 50 states as well as Puerto Rico, Chile, Mexico and the Marshall Islands. These principles were an important step forward as they

broadened the meaning of “environment” in the context of social justice, and EJ was reconceptualized from addressing communities’ proximity to an environmental toxin to also fostering community self-determination in determining a healthy environment inclusive of healthy outcomes for the community itself. Now, thirty-plus years later, these principles remain relevant for identifying and addressing EJ concerns.

### **Federal Directives Addressing Equity and Environmental Justice**

There are many Federal laws and policies that require full public participation in social, economic, and political life of the country, and that support achieving EEJ. These range from the very broad, such as the basic rights advanced by the Civil Rights Act of 1964, to the more targeted, such as Section 508 of the Rehabilitation Act (29 U.S.C. § 794d) which required Federal agencies to develop, procure, maintain and use information and communications technology that is accessible to people with disabilities. Here we focus on those Federal Directives most closely linked to environmental justice.

[Executive Order \(EO\) 12898](#) (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) was signed on February 11, 1994 and was a response to broader social and environmental concerns (59 Federal Register [FR] 7629; February 16, 1994). This EO directed Federal agencies “*to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.*” Among other strategies identified, Federal agencies must identify any differential patterns of consumption of natural resources among minority populations and low-income populations.

The Federal government’s efforts to address EJ and related issues of equity and accessibility did not stop with EO 12898. For example, the White House Council on Environmental Quality’s (CEQ) EJ guidance under the National Environmental Policy Act (NEPA) specifically calls for consideration of potential disproportionately high and adverse impacts to Indian tribes, as well as other minority populations (CEQ 1997).

[EO 13175](#) (Consultation and Coordination with Indian Tribal Governments) was signed on November 6, 2000 (65 FR 67249; November 9, 2000). This EO was promulgated “*in order to establish regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies that have tribal implications, to strengthen the United States government-to-government relationships with Indian tribes, and to reduce the imposition of unfunded mandates upon Indian tribes.*” It is important to note that, within the context of Federal fisheries management, including the regional Councils and CCC, it is NOAA Fisheries that is responsible for carrying out Tribal Consultations.

While advances have been made within the EJ movement, historical disparities in public policies and systemic racism have denied equal opportunities and protections to individuals and communities (Mohai, Pellow, & Roberts; 2009; Walker 2012). Recognizing this, current national policy priorities include advancing environmental justice and racial equity and addressing the climate crisis.

The [Presidential Memorandum of January 26, 2021](#) (Tribal Consultation and Strengthening Nation-to-Nation Relationships) affirms that the Administration “...is committed to honoring Tribal sovereignty and including Tribal voices in policy deliberation that affects Tribal communities. The Federal Government has much to learn from Tribal Nations and strong communication is fundamental to a constructive relationship” (86 FR 7491, January 29, 2021).

In November 2021, CEQ along with the White House Office of Science and Technology issued a [memorandum](#) naming Indigenous Traditional Ecological Knowledge as an “...important body of knowledge that contributes to the scientific, technical, social, and economic advancements of the United States and to our collective understanding of the natural world” and relates this knowledge directly to federal decision making.

Signed in January 2021, [EO 13985](#) (Advancing Racial Equity and Support for Underserved Communities Through the Federal Government) requires federal agencies to pursue a “comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality” (86 FR 7009; January 25, 2021).

Also signed in 2021, [EO 14008](#) (Tackling the Climate Crisis at Home and Abroad) directs federal agencies to “make achieving environmental justice part of their missions by developing programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts” (86 FR 7619; February 1, 2021).

Signed in May 2021, [EO 14031](#) (Advancing Equity, Justice, and Opportunity for Asian Americans, Native Hawaiians, and Pacific Islanders) established the President's Advisory Commission on Asian Americans, Native Hawaiians, and Pacific Islanders and the White House Initiative on Asian Americans, Native Hawaiians, and Pacific Islanders (86 FR 29675; June 3, 2021). Both will work to advance equity, justice, and opportunity for Asian Americans, Native Hawaiians, and Pacific Islanders in the United States.

### **What Provisions of the MSA Relate to Equity and Environmental Justice?**

The MSA is the primary legislation governing all resources in the U.S. exclusive economic zone (3 to 200 nautical miles from shore), and it has specific requirements for an open, transparent, and inclusive management process that takes into account the social and economic impacts of proposed regulatory measures. While the MSA does not use the terms “equity” or “environmental justice” explicitly, many sections of the MSA are implicitly connected to EEJ (described below). References to equity are made in several places of the MSA, often in connection with the fair and equitable allocation of fishing privileges (e.g., National Standard 4). In combination with the Federal Directives and EOs described in Section 2, these sections are the cornerstone of fishery management and policy-making in relation to EEJ. The following sections draw on the diverse experiences and expertise of the workgroup, in addition to *A Practitioner’s Guide to Fisheries Social Impact Assessment* (Clay & Colburn 2020), which highlights several MSA provisions that require the consideration of social and cultural impacts in fisheries management.

## Sec. 2 Findings, Purposes, and Policy

The introduction of the MSA includes declarations that:

- The fishery resources of the United States “*contribute to the food supply, economy, and health of the Nation and provide recreational opportunities*” (MSA Section 2(a)(1)). This implies that the management of fisheries should be to the benefit of all peoples.
- “*Pacific Insular Areas contain unique historical, cultural, legal, political, and geographical circumstances which make fisheries resources important in sustaining their economic growth*” (MSA Section 2(a)(10)). This declares the importance of fisheries to the socio-economic fabric of the U.S. territories in the Pacific Ocean. It is further declared that the fishery resources adjacent to these areas be “*managed for the benefit of the people of such areas and of the United States*” (MSA Section 2(c)(7)).
- “*...the national fishery conservation and management program ... involves, and is responsive to the needs of, interested and affected States and citizens...*” (MSA Section 2(c)(3)).

### Sec 301. National Standards for Fishery Conservation and Management

National Standard 1 stipulates that “management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.” Optimum yield is defined in the MSA as: “the amount of fish that will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities and taking into account the protection of marine ecosystems; that is prescribed on the basis of the MSY [maximum sustainable yield] from the fishery, as reduced by any relevant economic, social, or ecological factor; and, in the case of an overfished fishery, that provides for rebuilding to a level consistent with producing the MSY in such fishery” (MSA section 3(33)).

Thus, there is a balance that management must strike among resource uses and users. The social considerations in the [National Standard 1 Guidelines](#) that relate to EJ include: avoidance of gear conflicts and resulting disputes, preservation of a way of life for fishermen and their families, dependence of local communities on a fishery, unemployment rates, percent of populations below the poverty level, population density, the cultural place of subsistence fishing, obligations under tribal treaties, and proportions of affected minority and low-income groups (50 CFR 600.310(e)(3)(iii)(B)(1)).

National Standard 3 stipulates that a stock of fish be managed as a unit throughout its range, and the [National Standard 3 Guidelines](#) indicate that management units may be defined according to “*the focus of the FMP's objectives, and may be organized around biological, geographic, economic, technical, social, or ecological perspectives*” (50 CFR 600.320(d)(1)). Where economic and social perspectives are used to define stock units, there could be EJ considerations in doing so.

National Standard 4 prohibits discrimination between residents of different states and requires that allocations be fair and equitable, promote conservation, and prevent excessive shares. The [National Standard 4 Guidelines](#) identify factors to consider in developing allocations. Those that relate to equity and environmental justice include: allocation decisions should be connected to the FMPs objectives, dependence on the fishery by present participants and coastal communities,



opportunity for new participants to enter the fishery, and the prevention of excessive shares (50 CFR 600.325(c)(3)(iv)). However, the consideration of present participants could inhibit EJ, if present participants have benefited from past decisions that disadvantaged underserved communities; preserving their access might limit the ability to provide new opportunities.

National Standard 8 requires considering “*the importance of fishery resources to fishing communities...*” The MSA defines “fishing community” as “*a community which is substantially dependent on or substantially engaged in the harvest or processing of fishery resources to meet social and economic needs, and includes fishing vessel owners, operators, and crew and United States fish processors that are based in such a community.*” The [National Standard 8 Guidelines](#) stipulate that a fishing community must be a geographic location (versus a community of interest) and that “*...analysis should assess the likely positive and negative social and economic impacts of the alternative management measures, over both the short and the long term, on fishing communities. Any particular management measure may economically benefit some communities while adversely affecting others. Economic impacts should be considered both for individual communities and for the group of all affected communities identified in the FMP. Impacts of both consumptive and non-consumptive uses of fishery resources should be considered*” (50 CFR 600.345(c)(1)-(5)).

### **Section 204(e) Permits for Foreign Fishing: Pacific Insular Areas**

Provisions of the MSA allow foreign vessels to fish within the U.S. EEZ in the Pacific Islands Region under a Pacific Insular Area Fishing Agreement (PIAFA). Funds derived from a PIAFA or settlements from illegal fishing in the U.S. EEZ are directed to the respective Territory to support fishery development, management and conservation. The PIAFA required the Territories of Guam and American Samoa and CNMI to develop three-year Marine Conservation Plans (MCPs) that identify funding priorities should funds become available through a PIAFA (sec. 204(e)(4)).

The Western Pacific Sustainable Fisheries Fund (SFF) was created as a repository “*...under a PIAFA and any funds or contributions received in support of conservation and management objectives under a MCP for any Pacific Insular Area.*” The Western Pacific Fishery Management Council developed a PRIA MCP to direct the use of the SFF funds (sec. 204(e)(7)). In 2012, the Consolidated and Further Continuing Appropriation Act authorized the Council to accept and deposit into the SFF funding for arrangements made in pursuant to specified fishing agreements with the Territories. Territories have authority to enter into U.S. Participating Territory Specified Fishing Agreements with vessels permitted under the Fishery Ecosystem Plan for Pelagic Fisheries of the Western Pacific Region (Pelagics FEP).

### **Sec 303. Contents of Fishery Management Plans**

FMP and their amendments must include fishery descriptions (MSA 303(a)(2)) and fishery impact statements (MSA 303(a)(9)) that document the “*conservation, economic, and social impacts, of the conservation and management measures on, and possible mitigation measures for*” the fishery participants, fishing communities, adjacent fisheries and the safety of human life at sea. This includes the “*Indian treaty fishing rights, if any.*”

The development of limited access systems is one of the discretionary provisions of FMPs. If developed, these limited access systems must take into account, among other things, the fair and equitable distribution of access privileges in the fishery (MSA 303(b)(6)).

### **Sec 303A. Limited Access Privilege Programs**

Concerning allocation in developing a limited access privilege program, measures shall include those *“to assist, when necessary and appropriate, entry-level and small vessel owner-operators, captains, crew, and fishing communities through set-asides of harvesting allocations, including providing privileges, which may include set-asides or allocations of harvesting privileges, or economic assistance in the purchase of limited access privileges”* (MSA 303A(c)(5)(C)).

### **Transparent Collaborative Process**

The MSA requires a transparent and collaborative process in the development of fishery management plans, enhancing the participation of affected communities and populations.

Public hearings must be conducted to allow all interested persons an opportunity to participate and be heard in the development of Council actions. Sec 302(h)(3) of the Act stipulates that Councils: *“conduct public hearings, at appropriate times and in appropriate locations in the geographical area concerned, so as to allow all interested persons an opportunity to be heard in the development of fishery management plans and amendments to such plans, and with respect to the administration and implementation of the provisions of this Act (and for purposes of this paragraph, the term ‘geographical area concerned’ may include an area under the authority of another Council if the fish in the fishery concerned migrate into, or occur in, that area or if the matters being heard affect fishermen of that area; but not unless such other Council is first consulted regarding the conduct of such hearings within its area).”*

Furthermore, Council meetings are open to the public for participation (MSA sec. 302(i)(2)(A)), with limited exceptions (e.g., national security, employment matters, or briefings on litigation in which the Council is interested). This open participation approach allows for meaningful interaction and exchange of ideas between the community members and managers.

### **Council and Advisory Panel Composition**

The MSA requires a fair representation of Council and advisory panels membership to provide a balanced representation across various interests (e.g., commercial, recreational, other interests) and geographical areas (sec. 302(a)(1)). Regarding Council voting members, sec. 302(b)(2)(A) stipulates that: *“The Secretary, in making appointments under this section, shall, to the extent practicable, ensure a fair and balanced apportionment, on a rotating or other basis, of the active participants (or their representatives) in the commercial and recreational fisheries under the jurisdiction of the Council...”* The focus on appointing active participants could work against EJ if there are groups that have been excluded from fisheries by past management decisions.

Sec. 302 (g)(3)(A) indicates that *“Each Council shall establish and maintain a fishing industry advisory committee which shall provide information and recommendations on, and assist in the development of, fishery management plans and amendments to such plans,”* and appointment to these committees *“shall be made by each Council in such a manner as to provide fair representation to commercial fishing interests in the geographical area of authority of the Council”* (sec. 302(g)(3)(B)). Detailed statistics about the level of participation by individuals

from these groups that are from or representing underserved communities disadvantaged by race, ethnicity, or income is not available.

### **Tribal and Indigenous Peoples**

The special role of Tribes and Indigenous Peoples in the development and implementation of fishery policies is acknowledged in the MSA. For example, sec. 302(b)(5)(A) stipulates that *“The Secretary shall appoint to the Pacific Council one representative of an Indian tribe with Federally recognized fishing rights from California, Oregon, Washington, or Idaho from a list of not less than 3 individuals submitted by the Tribal governments. The Secretary, in consultation with the Secretary of the Interior and Tribal governments, shall establish by regulation the procedure for submitting a list under this subparagraph.”*

Furthermore, additional community-based programs have the goal to promote the development of social, cultural, and commercial initiatives to enhance opportunities for underserved communities. Examples of these programs are:

- The Western Pacific Demonstration Projects (16 U.S.C. 1855 note) intended to encourage fishery demonstration projects to foster and promote traditional indigenous fishing practices.
- Western Pacific and Northern Pacific Regional Marine Education and Training (MSA sec 305(j)) intended to foster understanding, practical use of knowledge (including native Hawaiian, Alaskan Native, and other Pacific Islander-based knowledge), and technical expertise relevant to stewardship of living marine resources), and
- The Alaska and Western Pacific Community Development Programs (MSA sec. 305(i)(1)) was created to provide eligible western Alaska villages with the opportunity to participate and invest in fisheries in the Bering Sea and Aleutian Islands Management Area; to support economic development in western Alaska; to alleviate poverty and provide economic and social benefits for residents of western Alaska; and to achieve sustainable and diversified local economies in western Alaska.

### **Equity and Environmental Justice in Fisheries**

The discussion below provides a high-level overview of EEJ in fisheries management, drawing from the prior sections on key terms, Federal directives related to EEJ, and the MSA. In doing so, we provide a lens for the reader to more easily understand the following section on actions the Councils are currently taking to address EEJ, which provides a starting point to identify opportunities for advancing EEJ together (as asked by NOAA Fisheries).

### **Underserved and Disadvantaged Fishing Communities, Groups, and Their Characteristics**

Management actions can modify and restructure the social effects and economic benefits of a fishery (Jentoft 2007). There is a need to identify groups and areas that may experience higher

social vulnerability<sup>4</sup> and determine where improvements can be made in the regulatory process. This is particularly true when discussing management measures that may impact the traditional fishing practices (e.g., area, methods) of underserved and disadvantaged communities (Carothers, Lew & Sepez 2010).

Social Impact Assessments are used, in part, to identify communities that could be impacted by a management action that could have additional EEJ impacts. EJ is measured at the community level, where a community is “either a group of individuals living in geographic proximity to one another, or a set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions of environmental exposure or effect.”<sup>5</sup>

Based on guidance from the Council on Environmental Quality, analyzing EEJ requires a solid understanding of communities that are engaged in or dependent on particular fishery (ies) that could be impacted by different management measures or actions (National Standard 8).

Communities hold important differences in cultural values, dependence, and sense of place that can affect their ability to respond to management changes. Factors that may make a community more vulnerable to adverse impacts of fishery management actions include higher unemployment levels, gentrification, high crime rates, low education levels, and general economic difficulties can have a substantial effect on how management measures are received.

### **Diversity of Managers and Staff**

The meaningful involvement of Tribes and other stakeholders includes descriptive representation<sup>6</sup> among fishery managers, regional Council staff and Council members, and within NOAA. However, underserved and disadvantaged community groups face numerous barriers to meaningfully engaging in decision-making processes including, but not limited to: resource constraints, technology, language, geography, hiring processes and organizational culture.

### **Meaningful Participation in Management Processes**

Stakeholder involvement in the fishery management process (e.g., on advisory bodies, public comment) is a key pathway through which Councils and NOAA Fisheries can consider diverse perspectives in decision-making (Pita, Pierce, & Theodossiou 2020). When decision-making processes lack meaningful opportunities for Tribes and other stakeholders to engage, and their perspectives are not fully considered, regulations can disproportionately impact marginalized groups and communities (Raymond-Yakoubian 2012) or lead to management actions/strategies that are not able to adapt over the long-run (Murphy, Harris, Estabrooks, & Wolf 2021).

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<sup>4</sup> Social vulnerability, along with the concept of resilience, relates to a community's ability to respond and adapt to change. For more on social vulnerability of geographic communities, see the appendix entitled “NOAA Fisheries Community Social Vulnerability Indicators”

<sup>5</sup> Per the White House Council on Environmental Quality (CEQ) Guidance on Environmental Justice under NEPA.

<sup>6</sup> Descriptive representation is a form of representation where the individual has a similar background to the people they represent, as opposed to substantive representation where representatives focus on the issues or concerns of a particular group.

The relative importance of diverse and inclusive representation in fishery management and decision-making processes is only expected to increase as climate change impacts the marine environment, fishery sustainability, and communities as people are able to share their knowledge, observations, or adaptive strategies (Chapman & Schott 2020; Flynn et al., 2016; Latulippe & Klenk 2020).

### **Climate Change, EEJ, and Fisheries Management**

Climate change is posing new and ongoing challenges for fisheries management across the nation that requires fisheries managers to adapt and respond appropriately, including actions that address near-term issues and observations as well as future environmental conditions and resource sustainability (Meredith et al., 2019). For example, shifting ocean conditions (i.e., temperatures and acidification) may redistribute stocks across international boundaries (Scheffers & Pecl 2019), making it increasingly important for fishery managers to be adaptive (Mason et al., 2021). While this example focuses on international boundaries, it is anticipated that there will be shifts of stocks between Council areas and states areas that require management responses.

Policy and regulatory responses to climate change will need to take EJ issues into account, as directed by EO 14008, “Tackling the Climate Crisis at Home and Abroad.” Executive Order 14008 states that addressing climate change will require a government-wide approach in every sector that “...*increases resilience to the impacts of climate change; protects public health; conserves our lands, waters, and biodiversity; [and] delivers environmental justice...*” (Sec. 201), and further identifies that “*Coastal communities have an essential role to play in mitigating climate change and strengthening resilience...*” (Sec. 216).

As the Councils and NOAA consider future management actions, climate change may present new social challenges that have EEJ considerations. Climate change is a current factor affecting wellbeing for many coastal communities and fishermen. Key stressors of climate change with direct impacts on fishermen and fishing communities include sea level rise, increased frequency and intensity of extreme weather events, and ocean acidification (NCA 2013). As the impacts of a changing climate continue, there are important EEJ implications for communities that may become more vulnerable, particularly if there are already relatively fewer resources available to support alternative jobs or supplement a loss of income (National Standard 8). It is anticipated that transparency, the meaningful involvement of diverse stakeholders’ perspectives, and opportunities for two-way engagement will be increasingly important attributes of governance that will confer resilience to climate change (Mason et al., 2021).

### **Local Knowledge and Traditional Ecological Knowledge**

There is increasing awareness that western science, while providing valuable data for fisheries management, can be limited to specific and often ecologically and temporally narrow approaches (Wheeler et al., 2020). National Standard 2 requires the best scientific information available be used to support decision-making; and it includes the long-term experiences of people who hold knowledge about the terrestrial and marine environments where they live and work (Huntington 2000; Johannes and Neis 2007; Mulalap et al., 2020; Stephenson et al., 2016; Thompson et al., 2020). The knowledge that traditional, sport, and commercial fishers, marine hunters, and local community residents can bring to a Council’s decision-making process is invaluable; it is knowledge based on entire careers, or passed through generations, and in the case of Traditional

Knowledge or Indigenous Knowledge, millennia (Ban et al. 2017; Thornton et al. 2010; Raymond-Yakoubian et al., 2017).

Including Local Knowledge (LK)/Traditional Knowledge (TK)/Traditional Ecological Knowledge (TEK) more systematically into the fishery management process not only helps Councils to better respond to National Standards (2 and 8, for example), but to expand opportunities for meaningful recognition and engagement of these knowledge holders (Raymond-Yakoubian 2012) and be more responsive to a myriad of Executive Orders. Historically, some individuals, communities, or Tribal governments have been limited in their ability to access management processes, as access is affected by language, epistemology, technology, and capital. Even social relations may prevent people from sharing their knowledge (Morrow and Hensel 1992; Sikor & Lund 2009). These kinds of disparities in access may reduce or outright constrain knowledge sharing participation in the management process. Indeed, as evidenced by a robust body of scholarship, these barriers to participation are often larger for a variety of underserved communities (Active 1999; Burgess 1999; Ellis 2005; Gritsenko 2018; Torrey 1978; Whyte 2011). Similarly, Indigenous world views are often incompatible with western concepts for fishery management, such as maximum sustainable yield, which is required by the MSA (Vonoit-Baron 2019).

### **What Are Some Things the Councils Have Done to Promote Equity and Environmental Justice?**

In the summer of 2021, the Office of Sustainable Fisheries met with the staff leadership of each Council and the three fishery commissions to understand their current approaches to engaging underserved communities. A summary of those discussions was presented at the October 2021 CCC meeting. In addition, one council<sup>7</sup> responded via letter to the administration regarding EO 13985 and EO 14031. This council has been working with their advisory bodies on both an EEJ programmatic assessment and the development of a regional EEJ strategy.<sup>8</sup>

One of the consistent themes throughout those discussions was that virtual and hybrid meetings have the potential to increase accessibility to meetings, but in some cases, reliable and affordable internet access can be a challenge. Some people also commented that, when language translation and interpretation services have been provided, they have proved to be useful for helping communities participate in the dialogue of public meetings. There was strong support for programs, such as the Marine Resources Education Program, which provide an informal setting for fishermen to learn about the management process. Finally, there was significant discussion on different options for supporting a pipeline of diverse Council nominees.

The following sections include several examples of actions to date by the Councils that support EEJ. This and the subsequent sections on impediments and what could be done are organized by the following six themes: outreach and engagement, best scientific information available, policy and planning, benefits, inclusive governance, and empowering environment. These are similar to

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<sup>7</sup> WPFMC sent a letter to Secretary Rice dated June 24, 2021 that outlined regional challenges and equity efforts in response to EO 13985 and EO 14031.

<sup>8</sup> WPFMC, its SSC and its Advisory Bodies provided and continue to provide EEJ specific recommendations that relate to the implementation of the EEJ EOs from 2021.

the six thematic areas that the NOAA Fisheries is focusing on within its draft Equity and Environmental Justice Strategy.<sup>9</sup>

The information provided here is not meant to be comprehensive but rather illustrative of the activities that advance EEJ within and across the regions. While some of these activities may not have been designed to address a particular EEJ issue (e.g., efforts to engage the public more broadly), they represent clear opportunities to support the overall goals of advancing EEJ. Detailed examples are in Appendix 2.

### **Outreach and Engagement: Establish and improve communications and relationships with underserved communities<sup>10</sup> to better understand their needs.**

Within the theme of “Outreach and Engagement,” Council efforts can be characterized under the following three sub-themes: education, community engagement, and reducing communication barriers. A summary of these sub-themes is described below (see Appendix 2 for specific examples).

- **Education:** Two-way education between decision-makers like the regional Councils and members of the public is important for meaningfully addressing equity and EJ. Councils work to improve communication and relationships via diverse educational and outreach efforts in various ways including: cultural awareness training for Council members and staff; educating stakeholders on the Council process; supporting Marine Resource Education Program (MREP) events; and hosting or participating in educational activities for high school, college, and graduate students.
- **Community engagement:** In addition to routine engagement activities, the Councils have developed regionally-specific engagement strategies for two-way communication and engagement, especially with underserved communities in their region. High-level examples of these efforts include: identifying staff leads for engagement and outreach work; hosting events with Council bodies and local communities outside of Council meetings; and hosting meetings across an expansive area or in rural communities to increase opportunities for engagement with the Council process.
- **Reducing communication barriers:** Several Councils have worked to provide multilingual documents on an as needed basis, accommodate video presentations, and provide translation services. Councils have also taken a flexible approach to providing information and materials in a way that is responsive to Tribal and stakeholder needs, such as providing information in hard copy formats which continues to be important for some regions.

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<sup>9</sup> NOAA Fisheries released a draft Equity and Environmental Justice Strategy in May 2022 for public comment. <https://www.fisheries.noaa.gov/feature-story/noaa-fisheries-invites-public-comment-new-draft-equity-and-environmental-justice>

<sup>10</sup> The definition of “Underserved Communities” from EO 13985 is provided above under “Key Terms.”

**Best Scientific Information Available: Research and monitoring activities to include underserved and disadvantaged communities, address their needs, and assess impacts of management activities**

Council staff generally do not conduct research, but the Councils are required to use the best scientific information available (National Standard 2) to support decision-making. The Councils do recommend research priorities and facilitate research essential to inform council decision making. Some examples of actions the Councils have taken to facilitate the use of best scientific information available include: restructuring management plans to be archipelagic ecosystem based (WPFMC) or Island-based (CFMC); incorporating Local Knowledge and Traditional Knowledge in fishery management; and developing and using NOAA Fisheries' Community Social Vulnerability Indicators (see Appendix 2 for examples).

**Policy and Planning: Incorporate EEJ into policies, programs, and plans**

All Councils have created policies to prevent harassment and discrimination and one Council is developing an EEJ strategy for its region (see Appendix 2 for examples).

**Benefits: Equitably distribute benefits among stakeholders by increasing the access to opportunities for underserved and disadvantaged communities**

Councils have taken steps to build local capacity for engaging in fisheries management, recognized and supported the diversity among local fisheries and been hesitant to limit access to fisheries (see Appendix 2 for examples).

**Inclusive Governance: make relevant decision-making processes accessible and inclusive of underserved communities**

All Councils engage through an open public process, structured around inclusionary practices and considerations. Some Councils compensate the members of the public for their time required to participate in the Council process (see Appendix 2 for examples).

**Empowering environment: Provide the institutional support needed to implement the multiple EEJ approaches**

One Council partners with local educational institutions to provide fisheries science and management training to undergraduate and graduate students. Additionally, internal educational investments for staff are provided that have afforded career growth opportunities (See Appendix 2 for examples).

**What Are Some Challenges to Addressing Equity and Environmental Justice Issues?**

The following sections identify various challenges to addressing EEJ in Federal fisheries management.



**Outreach and Engagement: Establish and improve communications and relationships with underserved communities<sup>11</sup> to better understand their needs.**

- Resource constraints (e.g., financial, time) can limit people’s availability or willingness to attend Council meetings.
- At times, members of the public may not feel free to express their opinions due to the opposition of others that have some power over them outside of Council processes.
- Some stakeholder groups (e.g., crew members) may lack organized associations that can meaningfully engage the Council’s processes, making it challenging to learn about the process and attend meetings.

**Best Scientific Information Available: Research and monitoring activities to include underserved and disadvantaged communities, address their needs, and assess impacts of management activities**

- There is a need for equity and EJ focused research and data collection that is specific to fisheries and potential upcoming actions. For example, E.O. 12898 (Sec 3-302) requires that Federal agencies “whenever practicable and appropriate, shall collect, maintain, and analyze information assessing and comparing environmental and human health risks borne by populations identified by race, national origin, or income.”
- There is a need to explore connections between the development of adaptive fishery policies, resilient fisheries and communities, and EEJ considerations, particularly in the context of climate change. These cross-cutting practices will require nuanced understanding and a high degree of collaboration.
- Adequate knowledge of underserved and disadvantaged communities is necessary for program evaluation to account for and adapt to mitigating EEJ related impacts.
- Vulnerability indices (within NOAA Fisheries Community Social Vulnerability Toolbox) describe census-level characteristics and are not necessarily reflective of fishing community vulnerability.
- Census data is limited in the Western Pacific region which forms the basis for many community demographic analyses and tools (Appendix I). Data is collected for Hawaii, as a State, but not a priority for the Pacific Territories and Commonwealth. These data limitations have broad reach in our policy setting.

**Policy and Planning: Incorporate EEJ into policies, programs, and plans**

- The MSA and its National Standards in many cases explicitly requires preserving the status quo in terms of fishing communities and fishery participation. There can be tensions where the status quo may have equity imbalances (e.g., not representative of the population) and/or not reflect cultural traditions. When fish stocks are declining, it can be particularly challenging for fisheries management to consider increasing access to fisheries.

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<sup>11</sup> The definition of “Underserved Communities” from EO 13985 is provided above under “Key Terms.”

- Many fisheries limit access by allocating privileges based on qualifying criteria that include prior participation in the fishery. In some cases, such criteria take into account existing fleets of socio-economic and cultural importance. In other situations, the criteria might lock into place status quo disparities established based on previous imbalances in the distribution of economic resources, power, and influence. The potential existence of such situations should be considered in determining initial allocations, and would be consistent with Section 303A(c(5))C) of the MSA.
- WPFMC region is now disadvantaged economically by the Billfish Conservation Act which prevents the export of billfish to the continental U.S.

**Benefits: Equitably distribute benefits among stakeholders by increasing the access to opportunities for underserved and disadvantaged communities**

- Economic opportunities in the Western Pacific are limited due to their geography and available resources. The primary resources available need to have the technical and administrative capacity to provide more funding and resources to their community. Regional solicitations paired with technical training workshops would allow Pacific Island communities to receive funding to access and manage their resources.
- WPFMC has experienced a lack of investments in data for the Western Pacific to better its data collection program that forms the basis for fishery decision making.
- WPFMC fisheries spatially overlap, and thus compete on the high seas, with international fisheries, but lack financial investments from the U.S. for fisheries as compared to resources distributed through USAID for international fisheries development (i.e., South Pacific Tuna Treaty).
- In American Samoa, New Zealand supports USCG regional efforts. The overall naval enforcement patrols aimed at mitigating foreign incursion issues remain ineffective.
- WPFMC: The political distinctions between territories and states play out in a couple important ways in the region. Data investments by the federal government (i.e., U.S. Census Bureau) differ between the two and when population dependent funding allocations are calculated, the territories suffer disproportionate outcomes.
- WPFMC: Due to geography, the region faces inherent increased costs from shipping, fuel and goods. There is a heavy community reliance on marine resources. There is an inherent importance of access to marine areas: for traditions and culture, subsistence, economic stability.
- The NEFMC has been disallowed from posting staff vacancy announcements on USA Jobs, but doing so could help reach underserved communities.

**Inclusive Governance: Make relevant decision-making processes accessible and inclusive of underserved communities**

- NPFMC received feedback from fishery stakeholders and Tribes to consider changes to its public comment procedures that limit individuals to three minutes and associations and governments to five minutes for oral comments. Specifically, the time limits place constraints on individuals and associations or governments sharing their full perspective,

particularly when English is a second language which can often be the case for Alaska Native Elders.

- Some stakeholders do not feel comfortable sharing their views in public or in front of others with contrary views.
- “Fishing communities” are geographically-based according to National Standard 8 guidelines. This appears to be in conflict with more recent guidance for analyses to be broader when considering who is impacted by actions.
- WPFMC: restrictions and regulations that affect fisheries are increasingly authorized outside of MSA and should be implemented under MSA (e.g., Antiquities Act, Endangered Species Act, Marine Mammal Protection Act).
- WPFMC has experienced promises made and promises not kept that include the monument center for the Mariana Trench Monument and commitments for funding a center in American Samoa.
- WPFMC faces structural inequity when it comes to language, level of communication and the difference in time. The western Pacific continues to face geographic isolation and distance from Washington, D.C. Pacific Territories and Commonwealth do not have voting members in the U.S. government (i.e., Senate, Congress).
- WPFMC believes the “one size fits all” approach to management is not appropriate as exemplified in the management of fisheries in the western Pacific with the application of MSA’s NS 1. As applied to our data-poor fisheries, it severely impacts communities by dramatically reducing the 2021 ACL for the American Samoa and Guam Bottomfish.
- WPFMC has an inherent importance of access to marine areas for traditions and culture, subsistence, and economic stability.
- WPFMC face inequity with policies/laws that prohibit cultural take/use; and affect familial relationships to resources.
- It is challenging to monitor and communicate the various identities and representation of Council members because, while NOAA Fisheries’ current nominee application form does collect gender identification data on Council nominees, it does not collect data on any other category such as race or ethnicity.
- A limited “pipeline” of diverse and qualified candidates remains a major impediment to appointing a more diverse Council membership. Like many other fields within the broad umbrella of marine science and conservation, this pipeline issue within fisheries can be attributed to the various biases and barriers present and also “an absence of support systems for under- represented minority individuals, leading to systemic effects of a non-inclusive and unempathetic environment”(Johri et. al 2021).

## **Empowering Environment: Provide the institutional support needed to implement the multiple EEJ approaches**

- Need adequate time and resources to meaningfully integrate EEJ considerations into day-to-day work.
- A lack of diversity in Council members and meeting participants, lack of translation services, and other factors may be creating an unwelcome environment for participants from more diverse backgrounds. Additionally, according to a report by the U.S. Equal Employment Opportunity Commission “...harassment is more likely to occur where there is a lack of diversity in the workplace. For example, sexual harassment of women is more likely to occur in workplaces that have primarily male employees, and racial/ethnic harassment is more likely to occur where one race or ethnicity is predominant.”<sup>12</sup> These issues can be impediments to creating an empowering environment for active participation from diverse groups.

### **What Are Some Things Could Councils Do?**

Below are examples of potential steps the Councils could explore to address EJ. This list is not comprehensive or intended to be action forcing for the Councils. The intent here is to stimulate thought and discussion.

## **Outreach and Engagement: Establish and improve communications and relationships with underserved communities to better understand their needs**

Through outreach and engagement, Councils have an opportunity to learn and dialogue about the viewpoints of stakeholders. Ensuring that the viewpoints presented to Councils represent a diversity of stakeholder opinions is essential for decision making. For example, Secretary of Commerce Gina Raimondo, observed:

*In my career as a leader, every time I've made a major mistake it is because I didn't have a diverse enough group of people around me offering their viewpoints, and I had a blind spot. And, I made the wrong decision because of that blind spot.... we can't let the loudest voices crowd out other voices. (Equity Town Hall, January 14, 2022. 4:50).*

Among many possibilities, consideration of the following might enhance Council outreach and engagement and ensure all voices are heard.

- Hosting listening or engagement sessions to understand what systemic biases may exist.
- Explore partnerships, such as Sea Grant field agent support, in meaningful community engagement. Are there ways to facilitate input from a broader constituency (e.g., “Outreach” internships where interns might visit docks to share and gather information)?
- Internet and Website Design – “Most, if not all, service organizations end up developing a bias toward current users. Sometimes that is at the expense of new users” (Bismark Myrick, Patent and Trade Office (PTO), DOC, Equity Town Hall, 2022, 29:30).

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<sup>12</sup> Select Task Force on the Study of Harassment in the Workplace. 2016. U.S. Equal Employment Opportunity Commission. [https://www.eeoc.gov/select-task-force-study-harassment-workplace#\\_ftnref124](https://www.eeoc.gov/select-task-force-study-harassment-workplace#_ftnref124)

Increased reliance on internet technologies makes it more likely that the Councils and NOAA will receive feedback and input from those with sufficient resources to engage via these platforms.

- Technological divide:
  - Limited internet access: In designing web pages, take into account those with minimal internet bandwidth.
  - Take into account that some may not have internet access or be working from libraries or smartphone technologies, at best.
- Limited knowledge:
  - Make it easy for someone not familiar with Council processes to find their way in. Maybe include webpages with guidance for: “New to the Council process?” or “First time on our website?”
  - Layer on information so as not to overwhelm those who may have limited tolerance for extensive reading.
  - Include video presentations in order to be inclusive of those who are more challenged in absorbing the written word.
- Inreach: Have more staff and Councils participate in trainings relating to cultural awareness and/or environmental justice.
- Outreach: Seek out opportunities for two-way dialogue (e.g., community visits, public hearings, listening sessions). Outreach and engagement with members of the public, especially underserved communities, will likely require more diverse materials and communication strategies.

**Best Scientific Information Available: Research and monitoring activities to include underserved and disadvantaged communities, address their needs, and assess impacts of management activities**

- Include information from the Census Bureau’s new “[Community Resilience Estimates](#)” in status and impact assessment documents, in regions and locations where available.<sup>13</sup> Consider whether these data might also be useful in targeting other research and outreach efforts.
- Work with NOAA Fisheries social scientists in the development of field projects to identify underserved groups and assess what types of things might facilitate their interest and participation.
- Express support for, or the development of, research priorities specific to environmental justice.
- Prioritize the collection of data related to crew and fishing communities in the GMFMC, SAFMC, MAFMC, and other regions as appropriate and as recommended by the 2021

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<sup>13</sup> Data is limited or absent for U.S. Territories.

National Academies' study, "[The Use of Limited Access Privilege Programs \(LAPP\) in Mixed-Use Fisheries.](#)"

### **Policy and Planning: Incorporate EEJ into policies, programs, and plans**

- Promote diversity and inclusion through an iterative process incorporating reflection and learnings similar to the adaptive fisheries management process. Make major changes when needed and tweak wherever there is opportunity.
- Be mindful of the impact of regulatory complexity on public engagement and understanding. Management actions and associated regulations are complex. As analyses and other decision-making documents increase in their complexity (in response to National Standards 2, 4, or 8, for example), the more challenging it may be for members of the public to meaningfully engage the decision-making process on those issues that affect their lives, livelihoods or cultural practices.
- Consider whether policies might be developed that are specific to certain communities. PFMC's groundfish license limitation system (Amendment 6 to the Pacific Coast Groundfish FMP) is an example of a possible structure for a policy that might specifically consider highly localized communities or groups within a regional or coastwide action. While there were general qualifying requirements that applied to all vessels in the PFMC area, special provisions were created to ensure that members of historic landmark fleets would continue to have access to the fishery, even if the individual vessels in the fleet did not meet the general qualifying requirements.

### **Benefits: Equitably distribute benefits among stakeholders by increasing the access to opportunities for underserved and disadvantaged communities**

- Work to incorporate equity and environmental justice considerations into all competitive funding opportunities.
- Appropriate funding levels to meet equity goals.

### **Inclusive Governance: Make relevant decision-making processes accessible and inclusive of underserved communities**

- Create materials, especially those intended to increase two-way engagement, in plain language with a focus on developing documents that are "concise, understandable, and readily accessible to the public" (EO 12898, Sec. 5-5(c)).
- Continue to allow multiple communication pathways to facilitate diverse public engagement.
- Evaluate procedural and institutional factors that contribute to the current situation in which minorities are generally underrepresented at NOAA and at the Councils.
- The CCC has an opportunity to set the collective tone on EEJ particularly through the iterative, public process created by the MSA.
- Use lessons-learned from remote and hybrid Council meetings to enhance accessibility and encourage meaningful participation in the Council process by all people regardless of

race, color, national origin, or income (e.g., allowing public comment for remote participants).

- Promote and participate in professional development programs in the fisheries management space. For example, the American Fisheries Society has the Hutton Program to foster minority enrollment in college programs in fisheries. WPFMC administers the USPI Scholarship for undergrad and graduate degree programs.
- Increase efforts to prepare a more diverse pool of potential future council nominees including through tactical outreach, education (both at universities and through programs like the Marine Resource Education Program), internship opportunities, etc. Encourage more diverse participants in Council bodies, such as advisory panels.
- Collect and report more data on the composition of Councils in terms of women, other gender categories, and minority status to enable tracking of demographics in the report to Congress on Council membership (e.g., DOC and NOAA 2020) to track progress towards increasing diversity over time.

**Empowering Environment: Provide the institutional support needed to implement the multiple EEJ approaches**

- Provide engaging and meaningful training opportunities targeted at NOAA Fisheries and Council staff to help build a shared understanding of the concepts of EEJ and how to implement these concepts in their work.
- Adopt and implement robust anti-discrimination and anti-harassment policies and increase efforts to promote inclusive Council working environments where participants from diverse backgrounds feel welcome and safe.
- Provide training for Council staff, Council members and other participants (e.g., AP or SSC members) on preventing harassment and discrimination to create more inclusive Council processes.

## Conclusions

Understanding and advancing EEJ in the context of Federal fisheries management takes careful thought. This report required nimble thinking from the workgroup, an understanding of the various Federal directives and policies related to EEJ, viewing fisheries management from new angles, and an understanding of the various paradigms and regional perspectives at play. The collaborative approach used to write this report was a useful start to sharing information and regionally-specific approaches to addressing EEJ across all Councils and NOAA. Having both NOAA Fisheries and Councils contribute to this report and take part in the supporting dialogue is a step forward for EEJ in Federal fisheries management. It is clear that, while some challenges exist for meaningfully advancing EEJ, all Councils are beginning to capture EEJ issues and considerations in their work.

This report reviewed MSA with an eye toward EEJ. The Councils, through the CCC and NOAA, have an opportunity to set the collective tone on EEJ, particularly through the iterative, public process created by the MSA. For example, public engagement is inherent to all Council's decision-making processes which are iterative, allowing for multiple points of input as issues progress towards implementation. Additionally, the MSA allows for regional diversity. This feature of the MSA is important as it allows Councils to forge EEJ strategies that are meaningful and specific to their regions; while also allowing the Councils to learn from each other. However, this report also identifies several opportunities for advancing EEJ across the regions. Some common themes include capacity building via Council and staff trainings, reimagining outreach strategies, increasing and simplifying communication materials, and more.

Overall, this report is a first step to better understanding the application of EEJ directives to U.S. fisheries management, the diverse EEJ efforts from across the regions, existing tools that can support EEJ within the MSA, and potential further action.



## **Some Potential Next Steps as a CCC**

### **CCC continued and sustained dialogue on EEJ.**

Use the CCC as a mechanism for Regional Council cross pollination of ideas/issues/solutions related to EEJ. The CCC, like many multilateral bodies, is structured to serve as a Peer-to-Peer Learning Network. Peer learning networks involve individuals, and for the CCC, individual regions, exchanging knowledge to inform and advance learnings in a new area of practice. Peer learning is an undefined process, can be both formal and informal and is highly contextualized, meaning it could take whichever form the CCC desires most appropriate and effective.

### **Continued work with NOAA Fisheries.**

Marrying the two EEJ efforts (CCC and NOAA Fisheries) more cohesively to coordinate efforts and resources, promoting Human Dimensions data collection and research in support of advancing EEJ. This may benefit from a workshop to initiate.

### **Continued synthesis of the information presented in this report.**

For instance, sharing the information presented to communities for their suggested improvements and better connecting barriers with remedies (e.g., funding, rulemaking).

### **Consider identifying a subset of potential EEJ related actions that could be addressed in concert, and through the CCC as a national body.**

A subset of the ideas in the above section “What could the Councils do?”, or perhaps other ideas, could be identified for collective action.

### **As appropriate to CCC’s desired next steps, the establishment of a CCC EEJ Working Group with the development of a terms of reference as their first task.**

## **Informal EEJ Working Group Participants & Affiliation**

Maria Carnevale (WPFMC), Morgan Corey (NOAA Fisheries), Rachel Feeney (NEFMC), Graciela Garcia-Moliner (CFMC), Kate Haapala (NPFMC), Stephanie Hunt (NOAA Fisheries), Debra Lambert (NOAA Fisheries), Ava Lasseter (GMFMC), José Montañez (MAFMC), Chris Moore (MAFMC), Michael Ruccio (NOAA Fisheries), Jim Seger (PFMC), Kitty Simonds (WPFMC), Christina Weingand (SAFMC) and Zachary Yamada (WPFMC)

## References

- Allison, E.H., B.D. Ratner, B. Åsgård, R. Willmann, R. Pomeroy, and J. Kurien (2012). Rights-based fisheries governance: from fishing rights to human rights. *Fish and Fisheries*, 13(1), 14-29.
- Anderson, C.M., M.J. Krigbaum, M.C. Arostegui, M.L. Feddern, J.Z. Koehn, P.T. Kuriyama, et al. (2019). How commercial fishing effort is managed. *Fish and Fisheries*, 20(2), 268-285.
- Ban, N.C., L. Eckert, M. McGreer, and A. Frid. (2017). Indigenous knowledge as data for modern fishery management: a case study of Dungeness crab in Pacific Canada. *Ecosystem Health and Sustainability*, 3(8), 1379887.
- Brulle R.J. and D.N. Pellow (2006). Environmental justice: human health and environmental inequalities. *Annu. Rev. Public Health* 27:103–24
- Burch W.R. (1976). The peregrine falcon and the urban poor: some sociological interrelations. In *Human Ecology: An Environmental Approach*, ed. P Richerson, J McEvoy III, pp. 308–16. North Scituate, MA: Duxbury.
- Bullard R.D. (1983). Solid waste sites and the Black Houston community. *Sociol. Inq.* 53:273–88
- Bullard R.D. (1996). Symposium: the legacy of American apartheid and environmental racism. *St. John's J. Leg. Comment.* 9:445–74
- Bullard R.D. (2000). *Dumping in Dixie: Race, Class, and Environmental Quality*. Boulder, Colorado: Westview. 3rd ed.
- Bryant B. and P. Mohai eds. (1992). *Race and the Incidence of Environmental Hazards: A Time for Discourse*. Boulder, CO: Westview.
- Capistrano, R.C.G. and A.T. Charles (2012). Indigenous rights and coastal fisheries: a framework of livelihoods, rights and equity. *Ocean and Coastal Management*, 69, 200-209.
- Carothers, C., D.K. Lew, and J. Sepez (2010). Fishing Rights and Small Communities: Alaska Halibut IFQ Transfer Patterns. *Ocean and Coastal Management*, 53(9), 518-523.
- Carothers, C. (2011). Equity and access to fishing rights: Exploring the community quota program in the Gulf of Alaska. *Human Organization*, 70(3), 213-223.
- Carothers, C., J. Black, S. Langdon, R. Donkersloot, D. Ringer, J. Coleman, et al. (2021). Indigenous peoples and salmon stewardship: a critical relationship. *Ecology and Society*, 26(1).

Chapman, J. M. and S. Schott (2020). Knowledge coevolution: generating new understanding through bridging and strengthening distinct knowledge systems and empowering local knowledge holders. *Sustainability Science*, 15(3), 931-943.

Chavis B.F. and C. Lee (1987). *Toxic Wastes and Race in the United States*. New York: United Church of Christ.

Clay, P.M., L.L. Colburn (2020). *A Practitioner's Handbook for Fisheries Social Impact Assessment*. NOAA Tech. Memo. [NMFS-F/SPO-212](#), 80 p.

DOC and NOAA. [2020 Report to Congress on the Regional Fishery Management Councils and Scientific and Statistical Committee Members' Financial Interest Disclosure and Recusal Requirements and on the Regional Fishery Management Councils Membership Apportionment](#). Department of Commerce and the National Oceanic and Atmospheric Administration. 42 p.

EPA, Office of Policy. [Environmental Justice 2020 Action Agenda](#). Environmental Protection Agency, 2016. 66 p.

Flynn, M., J.D. Ford, T. Pearce, S.L. Harper and IHACC Research Team (2018). Participatory scenario planning and climate change impacts, adaptation and vulnerability research in the Arctic. *Environmental Science and Policy*, 79, 45-53.

Huntington, H.P. (2000). Using traditional ecological knowledge in science: Methods and applications." *Ecological Applications*, 10(5), 1270-1274.

Jentoft, S. (2007). In the Power of Power: The Understated Aspect of Fisheries and Coastal Management. *Human Organization*, 66, 426-436.

Johri S., M. Carnevale, L. Porter, A. Zivian, M. Kourantidou, E.L. Meyer, J. Seevers and R.A. Skubel (2021). Pathways to Justice, Equity, Diversity, and Inclusion in Marine Science and Conservation. *Front. Mar. Sci.* 8:696180. doi: 10.3389/fmars.2021.696180

Jepson, Michael and L.L. Colburn (2013). *Development of Social Indicators of Fishing Community Vulnerability and Resilience in the U.S. Southeast and Northeast Regions* NOAA Technical Memorandum [NMFS-F/SPO-129](#) April 2013.

Johannes, R.E. and B. Neis (2007). *The value of anecdote. Fishers' knowledge in fisheries science and management*. Paris: UNESCO Publishing.

Lave L.B. and E.P. Seskin (1970). Air pollution and human health. *Science* 169:728

Latulippe, N. and N. Klenk (2020). Making room and moving over: knowledge co-production, Indigenous knowledge sovereignty and the politics of global environmental change decision-making. *Current Opinion in Environmental Sustainability*, 42, 7-14.

MacKenzie, M.K., et al.(2007). “Environmental Justice for Indigenous Hawaiians: Reclaiming Land and Resources.” *Natural Resources & Environment*, vol. 21, no. 3, American Bar Association, pp. 37–79, <http://www.jstor.org/stable/40924828>.

Martin, S. (2015). Indigenous social and economic adaptations in northern Alaska as measures of resilience. *Ecology and Society*, 20(4).

Mason, J.G., J.G. Eurich, J.D. Lau, W. Battista, C.M. Free, K.E. Mills, K. Tokunaga, L.Z. Zhao, M. Dickey-Collas, M. Valle, G.T. Pecl (2021). Attributes of climate resilience in fisheries: From theory to practice. *Fish and Fisheries*.

McDermott, M., S. Mahanty, and K. Schreckenberg (2013). Examining equity: A multidimensional framework for assessing equity in payments for ecosystem services. *Environmental Science and Policy*, 33, 416-427.

Meredith et al. (2019). Polar Regions. In: Portner, Roberts, Masson-Delmotte, Zhai, Tignor, Poloczanska, Mintenbeck, Nicolai, Okem, Petzold, Rama and Weyer (Editors), *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate*.

Mohai, P., D. Pellow, and J.T. Roberts (2009). Environmental Justice. *Annual Review of Environment and Resources*, 34(1) p. 405-430.

Mulalap, C.Y., T. Frere, E. Huffer, E. Hviding, K. Paul, A. Smith, and M.K. Vierros (2020). Traditional knowledge and the BBNJ instrument. *Marine Policy*, 122, 104103.

National Climate Assessment (NCA), Climate Change Impacts and Responses: Societal Indicators for the National Climate Assessment. U.S. Global Change Research Program (USGCRP), NCA Report Series 2013; Volume 5c, p.122

Pita, C., G.J. Pierce, and I. Theodossiou. (2010). Stakeholders' participation in the fisheries management decision-making process: Fishers' perceptions of participation. *Marine Policy*, 34, 1093-1102

Raymond-Yakoubian, J., B. Raymond-Yakoubian, and C. Moncrieff, C. (2017). The incorporation of traditional knowledge into Alaska federal fisheries management.” *Marine Policy*, 78, 132–42.

Raymond-Yakoubian, J. (2009). Participation and resistance: Tribal involvement in Bering Sea fisheries Management and Policy. In: C. Carothers, K.R. Criddle, C.P. Chambers, P.J. Cullenberg, J.A. Fall, A.H. Himes-Cornell, J.P. Johnsen, N.S. Kimball, C.R. Menzies, and E.S. Springer (eds.), *Fishing people of the north: cultures, economies, and management responding to change* (117-130). Alaska Sea Grant, University of Alaska Fairbanks.

Schlosberg, D. (2007). *Defining Environmental Justice: Theories, Movements and Nature*. Oxford: Oxford University Press.

Schreckenberg, K., P. Franks, A. Martin, and B. Long (2016). Unpacking equity for protected area conservation. *Parks*, 22, 11-26.

Stephenson, R.L., S. Paul, M.A. Pastoors, A. Kraan, P. Holm, M. Wiber et al. (2016). Integrating fishers' knowledge research in science and management. *ICES Journal of Marine Science*, 73(6), 1459-1465.

Szymkowiak, M., S. Kasperski, and D.K. Lew (2019). Identifying community risk factors for quota share loss. *Ocean and Coastal Management*, 178, 104851.

Thompson, K.L., T. Lantz, and N. Ban (2020). A review of Indigenous knowledge and participation in environmental monitoring. *Ecology and Society*, 25(2).

Thornton, T.F., M.L. Moss, V.L. Butler, J. Hebert, and F. Funk (2010). Local and traditional knowledge and the historical ecology of Pacific Herring in Alaska. *Journal of Ecological Anthropology*, 14(1), 81-88.

U.S. Gen. Account. Office (1983). *Siting of Hazardous Waste Landfills and Their Correlation with Racial and Economic Status of Surrounding Communities*. Washington, DC: U.S. Gov. Print. Office, 25p.

Voinot-Baron, W. (2019). Inescapable temporalities: Chinook salmon and the non-sovereignty of co-management in southwest Alaska. *Engagement, Anthropology and Environment Society*. [Blog](#).

Walker, G. (2012). *Environmental Justice: Concepts, Evidence, and Politics*. London: Routledge, 272p.

## **Appendix 1: [The Principles of Environmental Justice](#)**

**WE, THE PEOPLE OF COLOR, gathered together at this multinational People of Color Environmental Leadership Summit, to begin to build a national and international movement of all peoples of color to fight the destruction and taking of our lands and communities, do hereby re-establish our spiritual interdependence to the sacredness of our Mother Earth; to respect and celebrate each of our cultures, languages and beliefs about the natural world and our roles in healing ourselves; to ensure environmental justice; to promote economic alternatives which would contribute to the development of environmentally safe livelihoods; and, to secure our political, economic and cultural liberation that has been denied for over 500 years of colonization and oppression, resulting in the poisoning of our communities and land and the genocide of our peoples, do affirm and adopt these Principles of Environmental Justice:**

- 1) Environmental Justice affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.
- 2) Environmental Justice demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.
- 3) Environmental Justice mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.
- 4) Environmental Justice calls for universal protection from nuclear testing, extraction, production and disposal of toxic/hazardous wastes and poisons and nuclear testing that threaten the fundamental right to clean air, land, water, and food.
- 5) Environmental Justice affirms the fundamental right to political, economic, cultural and environmental self-determination of all peoples.
- 6) Environmental Justice demands the cessation of the production of all toxins, hazardous wastes, and radioactive materials, and that all past and current producers be held strictly accountable to the people for detoxification and the containment at the point of production.
- 7) Environmental Justice demands the right to participate as equal partners at every level of decision making, including needs assessment, planning, implementation, enforcement and evaluation.
- 8) Environmental Justice affirms the right of all workers to a safe and healthy work environment without being forced to choose between an unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.
- 9) Environmental Justice protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care.
- 10) Environmental Justice considers governmental acts of environmental injustice a violation of international law, the Universal Declaration On Human Rights, and the United Nations Convention on Genocide.

- 11) Environmental Justice must recognize a special legal and natural relationship of Native Peoples to the U.S. government through treaties, agreements, compacts, and covenants affirming sovereignty and self-determination.
- 12) Environmental Justice affirms the need for urban and rural ecological policies to clean up and rebuild our cities and rural areas in balance with nature, honoring the cultural integrity of all our communities, and provided fair access for all to the full range of resources.
- 13) Environmental Justice calls for the strict enforcement of principles of informed consent, and a halt to the testing of experimental reproductive and medical procedures and vaccinations on people of color.
- 14) Environmental Justice opposes the destructive operations of multinational corporations.
- 15) Environmental Justice opposes military occupation, repression and exploitation of lands, peoples and cultures, and other life forms.
- 16) Environmental Justice calls for the education of present and future generations which emphasizes social and environmental issues, based on our experience and an appreciation of our diverse cultural perspectives.
- 17) Environmental Justice requires that we, as individuals, make personal and consumer choices to consume as little of Mother Earth's resources and to produce as little waste as possible; and make the conscious decision to challenge and reprioritize our lifestyles to ensure the health of the natural world for present and future generations.

## **Appendix 2: Detailed working list of examples outlining actions the Councils have done/are doing to respond to calls for supporting equity and environmental justice.**

The information provided here is not meant to be comprehensive but rather illustrative of the activities that advance EEJ within and across the regions. While some of these activities may not have been designed to address a particular equity or EJ issue (e.g., efforts to engage the public more broadly), they represent clear opportunities to support the overall goals of advancing EEJ.

Outreach and Engagement: Establish and improve communications and relationships with underserved communities<sup>14</sup> to better understand their needs

- Educational activity examples:
  - NPFMC – Council members and staff have participated in a cultural awareness training on Alaska Native governance and protocols for working with Alaska Native Tribes, Organizations, and communities.
  - NPFMC – Council staff have provided an Introduction to the Council Process presentation at Council meetings (when in-person) and to other management bodies (e.g., Subsistence Regional Advisory Councils) and Alaska Native organizations (e.g., the Yukon River Drainage Fisheries Association) as requested.
  - WPFMC – Council hosted high school summer courses on Oahu, Guam, Saipan and American Samoa. Course provides an introduction to fishery management.
  - WPFMC – Outside of COVID-19 restrictions, and in concert within person meetings, the Council would host a fishers forum to engage and educate the community on current discussion topics in fisheries management.
  - PFMC, CFMC (in Spanish in Puerto Rico, English in St. Thomas, USVI), NEFMC, MAFMC, SAFMC, and GMFMC support Marine Resource Education Program (MREP) events, which are designed to “empower fishermen with better understanding of how, when, and where to engage effectively in fisheries science and management.” Councils are key participants in regional MREP planning teams, support a national MREP steering Committee, and provide funding to and present at MREP programs.
  - CFMC, NEFMC, MAFMC, SAFMC – Council members and staff participate in grade/high school activities, engage in undergraduate and graduate University activities, engage in the USCG Living Marine Resources Training Program, and other education programs, providing information in both English and Spanish.
- Community engagement examples:
  - NPFMC – Community Engagement Committee (formerly the Rural Outreach Committee) was formed in 2018, and reconstituted in 2021, to recommend strategies for the Council to effectively carry out two-way communication and engagement with Alaska Native and rural communities.

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<sup>14</sup> The definition of “Underserved Communities” from EO 13985 is provided above under “Key Terms.”



- NPFMC – In February 2021, the NPFMC assigned Tribal and rural fishing community responsibilities to Council staff.
- CFMC – The Outreach and Education Panel (OEAP) was formed in 2011 and its membership includes fishers, local government officials, Sea Grant and Council staff, and experts on communication. All initiatives for engagement are prepared in both English and Spanish.
- CFMC – The Districts Advisory Panels (DAPs) have representation from each Island (Puerto Rico, St. Thomas/St. John and St. Croix) including stakeholders representing the culinary industry, commercial and recreational fishers, NGOs, enforcement, and other marine resource users. Social media networks have become the way of reminding communities about seasonal regulations. These reminders are usually accompanied by a bit of scientific information on the reason for the management measure.
- CFMC – Hosting joint meetings of the SSC and DAPs has increased participation of the industry in the scientific discussions, most significantly in the development of the Fishery Ecosystem Plan.
- WPFMC – Hosting SSC and Council meetings across the islands to meet with the community. Increased meeting frequency from 3 to 4 times to allow for a Council meeting in each of the island areas that comprise our region. This allowed for meaningful engagement with the fishing community around the same time of the Council meeting and easier participation.
- NPFMC – One of the five Council meetings each year is in a rural fishing community (the location varies annually) to expand opportunities for engagement with the Council process.
- SAFMC - Due to their large coastlines, the Council meetings in North Carolina and Florida rotate locations annually to ensure meaningful engagement and participation from communities in different areas of the coast.
- Reducing communication barrier examples:
  - PFMC – Fliers in English and Spanish for its most recent major limited access action (trawl catch shares in 2006) which were distributed with help of Sea Grant.
  - CFMC – The Outreach and Education Advisory Panel prepares posters, booklets, coloring books, recipe books and videos in English and Spanish of topics being discussed at the Council. These include correct identification of species, importance of marine protected areas, ecosystem concepts and life history information, among others.
  - CFMC – Fishery Management Plans are written in English but the regulatory actions, as well as the rationale, are translated into Spanish. USPS mailings are still a preferred form of communication in the region, so all materials are mailed as hard copies, emailed, posted to social media networks, and distributed through liaison staff. Also, communicate and distribute materials, in person, to the fishing centers, etc.

- NEFMC – Documents have been translated into Portuguese a few times, though it has been several years since receiving such requests.
- WPFMC – Documents have been translated for Hawaiian, Vietnamese, Chinese, Chamorro, Refaluwash, and Samoan fishing communities and fleets. Translations have also been included for implementation of fishery regulations (Electronic Reporting).
- GMFMC and SAFMC – For regulatory actions affecting FMPs known to employ minority populations, summary guides have occasionally been translated into Spanish for spiny lobster, king mackerel, and Spanish mackerel, and Vietnamese for shrimp. Staff has arranged for translators from local communities to provide translation services at public hearings in Vietnamese for shrimp and Spanish for spiny lobster and migratory pelagic species.
- CFMC – Throughout its history, all CFMC meetings and its District Advisory Panels for Puerto Rico and St. Croix have simultaneous translation (English-Spanish).
- Services for the hearing impaired are routinely offered as part of meeting notices. Such services were requested on one occasion for a PFMC hearing.
- MAFMC and SAFMC – For some actions, Council staff has created narrated scoping presentations on YouTube as a way to increase public participation.
- MAFMC - Council meetings are broadcasted live over YouTube.
- NPFMC– The Council has created several outreach fliers that provide information to members of the public on how to navigate the Council process (e.g., tracking an idea through to implementation).
- NPFMC– Throughout the global COVID-19 pandemic, the NPFMC has broadcast its AP, SSC, and Council meetings live over YouTube.

Best Scientific Information Available: 15 Research and monitoring activities to include underserved and disadvantaged communities, address their needs, and assess impacts of management activities

- Several Councils have taken action to restructure their fishery management plans, advisory bodies, and overall strategy to better facilitate the sharing and incorporation of local, community, and other stakeholder knowledge. Examples:
  - WPFMC– Restructured its management plans to archipelagic ecosystem based plans that afford the community to provide direct place based advisory input.
  - CFMC– Developed and approved its Island-Based Fishery Management Plans for Puerto Rico, St. Thomas/St. John and St. Croix, all of which recognize the sociocultural and fishery-related differences among the Islands. The Island-Based

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<sup>15</sup> Council staff generally do not conduct research, but the Councils are required to use the best scientific information available (National Standard 2) to support decision-making. The Councils do recommend research priorities and facilitate research essential to inform council decision making.

Fishery Management Plans were approved in 2020 and are pending implementation. COVID-19 related mandates delayed development of the proposed rule.

- NPFMC– Formed the Local Knowledge (LK), Traditional Knowledge (TK), and Subsistence Taskforce in 2019 to create processes and protocols for identifying, analyzing, and including LK, TK, the social science of LK and TK, and subsistence information into its decision-making process. The LKTKS Taskforce is a nominated body composed of Indigenous and non-Indigenous issue experts across the Bering Sea region.
- WPFMC– Has an Indigenous advisory body and standing committee, “Fishery Rights of Indigenous Peoples.”
- WPFMC– Hosts an annual Fishermen Observation Summit to capture fishermen’s on-the-water observations to improve understanding of the ecosystem.
- SAFMC and MAFMC - Conducts Fishery Performance Reports with Advisory Panel members to gather their experiences and observations on the water and in the marketplace to complement scientific and landings data.
- NEFMC - Receives much public comment providing local ecological knowledge that informs decisions and has used peer-reviewed work to gather this information.
- Identifying EJ as a research priority
  - NEFMC– In 2020, the NEFMC added to its list of research priorities, “*Research and/or policy analysis to move towards recommendations for how the Council addresses environmental justice, including the nexus with data collection and repeatability, and process recommendations for engagement.*” This was also a recommendation from a programmatic review of the NEFMC in 2018.
  - WPFMC– In 2021, the WPFMC, as recommended by its SSC, included EEJ in the annual guidance memo letter to PIFSC which calls for “*a need to characterize the lens of EEJ within fisheries management and track the region’s actions and related progress.*”
- Analyzing the impacts of management actions in relation to EJ
  - All Councils now include an Environmental Justice section in most regulatory documents (primarily EA and EIS) for the purpose of addressing EO 12898.
- Developing and using the NOAA Fisheries [Community Social Vulnerability Indicators](#). In response to the requirements in E.O. 12898 to consider environmental justice and of the MSA to consider the importance of fishery resources to fishing communities, social scientists with NOAA Fisheries have developed and are expanding the [Community Social Vulnerability Indicators](#) (Appendix 3). Here are examples of how Councils have used them:
  - GMFMC, CFMC, NEFMC, MAFMC, PFMC and SAFMC use these indicators in Council action documents, as appropriate: in descriptions of the affected environment, in impact analysis, and/or addressing how the action meets EO

12898. This includes analyses that examine the social vulnerability of communities identified as engaged in and/or reliant on the stock(s) subject to the action. However, the alternatives for taking action do not apply to the community level and the analyses are for information only and to comply with National Standard 8.

- SAFMC uses the indicators in their Allocation Decision Tool which describes the biological, economic, and social considerations that may be relevant to sector allocation decisions.

#### Policy and Planning: Incorporate EEJ into policies, programs, and plans

- All councils have policies against harassment and discrimination on the basis of race, religion, color, national origin, sex, age (40 and over), sexual orientation, disability and reprisal, though harassment and discrimination are covered by different statutes and policies. These policies address both recruiting and appointment as well as conduct while participating in the Council process.
- WPFMC has a Western Pacific EEJ regional strategy in development that cross references all program planning efforts within an EEJ framework. An EEJ assessment was conducted between 2021 and 2022, with ongoing contributions welcome by all advisory bodies and Council Members.

#### Benefits: Equitably distribute benefits among stakeholders by increasing the access to opportunities for underserved and disadvantaged communities

- In the past, Territorial Science was listed as a distinct priority within the NOAA Fisheries Saltonsall-Kennedy grant program.
- WPFMC's USPI Territories Fishery Capacity-Building Scholarship provides financial support from Council, PIRO and PIFSC for students from Guam, CNMI and American Samoa to provide local agencies with trained qualified employees. The program is unique because it builds local capacity in the larger Pacific region for fisheries management.<sup>16</sup>
- WPFMC has continued to support local representation at conferences such as International Pacific Marine Educators Network (IPMEN), Ocean Obs'19, etc.
- WPFMC Pacific Islands Area Fishing Agreements (PIAFA) Sustainable Fisheries Fund. Funds derived from a PIAFA or settlements from illegal fishing in the U.S. EEZ are directed to the respective Territory to support fishery development, management and conservation. PIAFA required the territories and Council to develop a 3-year Marine Conservation Plan that identifies funding priorities.
- WPFMC recognized special fishing practices, including traditional indigenous practices, for native peoples in American Samoa, Guam, Hawaii, and the Northern Mariana Islands through the establishment of the Western Pacific Community Development Program (CDP). The intent of the program is to provide communities access to fisheries that they

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<sup>16</sup> Other Councils may have grant restrictions on funding scholarships for people other than employees.

have traditionally depended upon but may not have the capabilities to support continued and substantial participation in, possible due to economic, regulatory, or other barriers.

- The Western Pacific Community Demonstration Project Program (CDPP) authorized the Secretary of Commerce and Interior to make direct grants, providing \$500,000 annually for not less than 3 and no more than 5 projects. Projects may demonstrate the applicability and feasibility of traditional marine conservation and fishing practices; develop or enhance community-based opportunities to participate in fisheries; involve research, community education, or the acquisition of materials and equipment necessary to carry out such demonstration project.
- CFMC recognizes each Island's (Puerto Rico, St. Thomas/St. John and St. Croix) socio-cultural idiosyncrasies and fisheries preferences and practices through the approved Comprehensive Island-Based FMP rather than the original U.S. Caribbean FMPs.
- The NEFMC has been reluctant to limit access to fisheries. Although many NEFMC-managed fisheries limit access, the qualification criteria selected often avoids excluding many vessels from the fishery.

**Inclusive Governance:** make relevant decision-making processes accessible and inclusive of underserved communities

- Council membership
  - The annual report to Congress on Councils' membership includes a section on Council membership diversity encouraging Governors to submit diverse candidates. The trend in women serving as appointed Council members has increased from 8 in 2011 to 17 in 2021 (NOAA Fisheries, Office of Sustainable Fisheries, personal communications).
  - The WPFMC Council membership is primarily composed of members from underserved communities.
- Tribal representation on Council advisory panels:
  - The PFMC includes tribal seats on a variety of its advisory bodies including its management teams, advisory panels, SSC, and habitat committee. The MSA also designates a council seat for a representative of an Indian tribe on the PFMC.
- Council as a public process:
  - NPFMC – When a member of the public signs up (electronically) to give oral public comment to the NPFMC, they can opt to waive questions from the Council. This procedural change was made in response to recommendations from the NPFMC's Community Engagement Committee as one way to make the decision-making process less intimidating, particularly for people who are new to the process.
  - *MAFMC 2020-2024 Strategic Plan* – The plan includes updated vision and mission statements and proposes five major goals to guide the Council's activities and management priorities for the next five years. Development of the plan was informed by public outreach conducted in early 2019. The Council gathered input for the strategic plan via an online stakeholder survey, meetings with advisory

panels and the Scientific and Statistical Committee, public input sessions, and management partner outreach. The feedback received represented a range of perspectives that is reflective of such factors as geography, stakeholder needs and interests, and length of involvement in the Council process. About half of survey respondents reported that they rarely or never participate in the Council process.

- *CFMC 2022-2026 Strategic Plan* updates the vision and mission statements and includes specific goals and objectives developed with input from the advisory panels, as well as the general public. The Council is currently developing the implementation plan and the specific research directives for each goal. The Council is closely working with the SERO and the SEFSC on the development of the research plans.
- For all Councils, public meetings are physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aid can be made available upon request. The NEFMC has made accommodations for people upon request.
- MAFMC and NEFMC – When the action to transition into Electronic Vessel Trip Reports was being developed in 2021, Council staff learned that there were some individuals that did not have the ability to comply with the new reporting requirements (e.g., could not read or write at a functional level, technology use challenges). In response, Council staff worked with GARFO to have Port Agents and the Office of Law Enforcement Compliance Office assist operators with questions or concerns about their ability to comply with the new requirements.
- WPFMC – Transition to archipelagic-ecosystem based fishery management plans allow the Council to better support communities through new institutional structures. This shift resulted in the development of activities and programs that engage communities to share, understand and document traditional resource management practices and knowledge. The Council then hired Island Staff Coordinators based in the different island areas to better facilitate community engagement on Council actions.
- WPFMC – After the Council took final action to transition the Hawaii Longline Fleet to Electronic reporting, the Council learned that the fleet had a Vietnamese speaking captain. In response, the Council, PIFSC and PIRO hired a Vietnamese translator to assist with the implementation with the local longline fleet.
- Some Councils (WPFMC, CFMC, and NPFMC) pay stipends to non-governmental representatives on some Council advisory bodies for days of meeting attendance (in addition to travel and per diem). This may broaden participation of lesser income individuals by making it more feasible to take time off to participate as an advisor in the Council process. For the PFMC, the amount of the stipend is not known until the end of the year and continuation of such payments is dependent on funding.

Empowering Environment: Provide the institutional support needed to implement the multiple EEJ approaches

- Staff capacity training
  - WPFMC began a collaboration with Hawaii Pacific University to provide fisheries science and management training to undergraduate and graduate students. Internally, the Council remains committed to providing staff professional and career development opportunities. These investments have provided staff with skills and qualifications to take on larger roles internally and externally.

### **Appendix 3: NOAA Fisheries Community Social Vulnerability Indicators**

In response to the requirements of E.O. 12898 to consider environmental justice and of the MSA to consider the importance of fishery resources to fishing communities, NOAA Fisheries social scientists developed [Community Social Vulnerability Indicators](#) to: 1) characterize community well-being for coastal communities engaged in fishing activities, and 2) measure community social vulnerability. These indicators are available at the national level and have been adapted for use in regulatory documents in most regions (e.g., GMFMC, SAFMC).

Fishing engagement, fishing reliance, and social vulnerability are three of the indicators for which data are available at the national level. The fishing communities relevant to an action can be identified using the first two, then social vulnerability measures are examined. The social vulnerability analyses are not specific to the fishing components of a community's economy. Thus, they may be used more by Councils lacking human dimensions data specific to their region's user groups. For example, there is little to no information about hired captains and crew in the Southeast Region.

The specified unit of social analysis in the MSA is primarily the fishing community, defined in part as a community which is substantially dependent on or substantially engaged in the harvest or processing of fishery resources that is tied to a specific location. The two social indicators for fishing engagement and fishing reliance are measured at the community level, specifically, the census-based place. In some cases, these may be aggregated to the county level such as in regions experiencing coastal gentrification. However, while these measures can inform on where fishing activity occurs, the structure of alternatives does not allow for decision makers to adjust management measures in consideration of spatial differences in marine resource usage.

Two social indicators that are used to identify communities engaged in fishing activities are fishing engagement and fishing reliance. Fishing engagement is a measure of fishing activity, and uses data from dealers, vessel landings, and permits. Fishing reliance uses the same data, but adjusts for population size. For the commercial sector, data are available to measure engagement and reliance on a particular stock; this measure includes data from dealers and vessels on landings, which can be aggregated to the community level. Recreational engagement and reliance are measured for fishing in general, as data are not available to measure at the community level for a particular stock.

To help assess whether any EJ concerns may be present within communities identified as engaged or reliant on one or more stocks, Jepson and Colburn (2013) developed a set of social indicators to assess social vulnerability of coastal communities. The three indicators are poverty, population composition, and personal disruptions. The variables included in each of these indices have been identified through the literature as being important components that contribute to a community's vulnerability. Indicators such as increased poverty rates for different groups, more single female-headed households and households with children under the age of five, disruptions such as higher separation rates, higher crime rates, and unemployment all are signs of populations experiencing vulnerabilities. The social vulnerability measures can be provided for the communities identified as being substantially engaged and/or reliant on the fishery subject to the action at hand. However, this measure is general to the identified community and not specific to the fishing components of the community.