

Seafood Nexus Workshop: Pathways for Strengthening Local & Regional Seafood Systems

Workshop Summary

Portland, Maine, University of Maine Gateway, May 1 – 2, 2024

In May 2024, a diverse group of fishermen¹, chefs, seafood processors, members of fishery associations, federal agency members, foundation representatives, and other stakeholders involved in local and regional seafood systems in the U.S.² convened in Portland, Maine for the two day Seafood Nexus Workshop: Pathways for Strengthening Local & Regional Seafood Systems. This workshop was organized by the University of Maine, with funding from NOAA Fisheries and the Builders Initiative with facilitation support from Meridian Institute and graphic facilitator, Marsha Dunn. Workshop objectives included:

1. Affirm challenges and barriers to building vibrant local and regional seafood systems;
2. Foster understanding of what others are doing and promote knowledge sharing and collaboration; and
3. Identify integrated pathways for strengthening local and regional seafood systems.

The ideas and pathways for strengthening local and regional seafood systems shared during the Seafood Nexus Workshop and captured in this summary will inform a National Action Plan to strengthen local and regional seafood systems in the U.S. that the University of Maine is co-producing with input from stakeholders. This summary is intended for workshop participants; participants are also welcome to share this document and the ideas from the workshop with those who may be interested³.

This report includes an overview of the workshop process, a synthesis of group discussions during key sessions, and an overview of potential pathways of change. Appendices at the end of this document (pages 13 – 24) capture examples and reference interventions that participants brainstormed, as well as detailed action plans.

Process Overview

Over the course of the workshop, participants affirmed current challenges and barriers in local and regional seafood systems and deepened their understanding of how the seafood system currently functions. Drawing on their knowledge of the existing seafood landscape, participants then identified opportunities to move towards a more vibrant and sustainable local and regional seafood system based on high priority leverage points within the system. Figure 1 illustrates the arc of discussion over the two-day workshop, spanning from barriers in the current seafood system to pathways towards the future that participants envisioned.

¹ We use the term ‘fishermen’ to refer to anyone involved in producing seafood, regardless of their gender, as this is typically the preferred term in the U.S. context.

² The scope of this work includes all U.S. states, internal sovereignties, overseas territories, and affiliated islands.

³ Please direct feedback, comments, and input to Joshua Stoll (joshua.stoll@maine.edu)

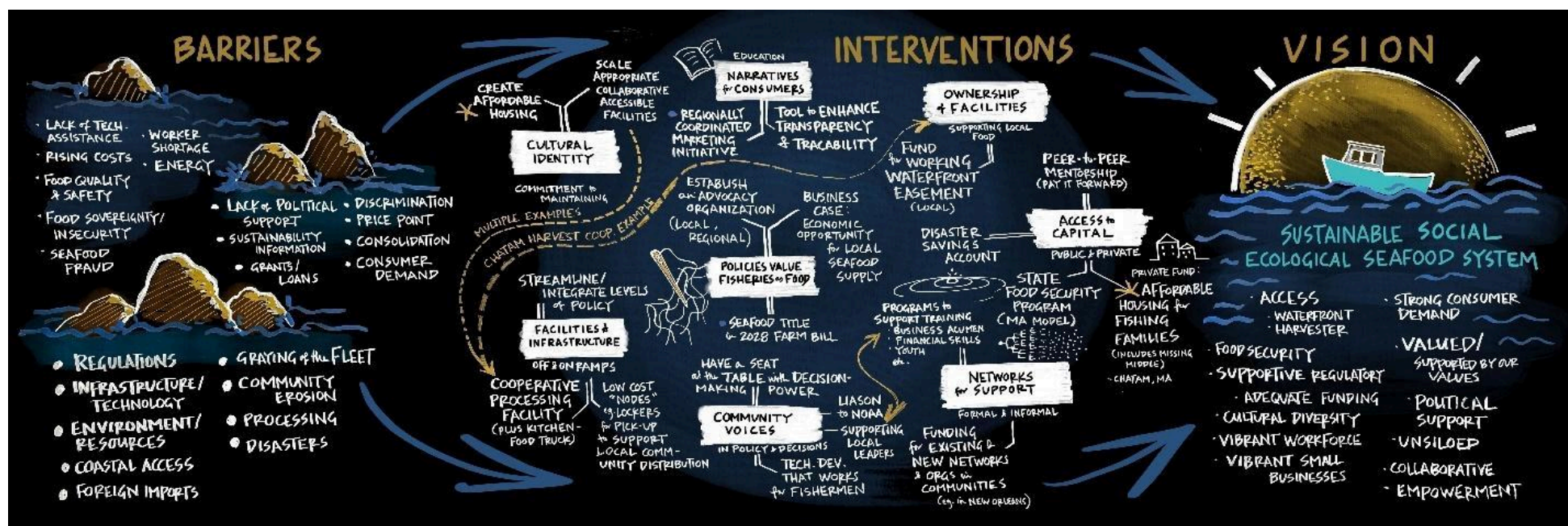


Figure 1. Where We Are, Where We're Going, and How to Get There

Workshop sessions for arriving at the final action plans included:

- **Creating a shared vision** for what the future of local and regional seafood should look like;
- **Affirming barriers and challenges** in the current local and regional seafood system;
- **Mapping the current system** to further understand its complexity and how it functions;
- **Identifying high-impact areas** where there is opportunity for positive change;
- **Generating interventions and examples** of potential pathways for change to inform future action;
- **Workshopping action plans** for addressing the key impact areas; and
- **Sharing final reflections** on the Workshop as a whole and how to move these ideas forward.

The following report further describes Workshop sessions, recaps key takeaways, and articulates pathways to improve the local and regional seafood system that participants discussed.

A Shared Vision for our Local and Regional Seafood System

Participants began the Workshop with a discussion of their hopes for local and regional seafood systems. Key pieces of this shared vision are illustrated in Figure 2.

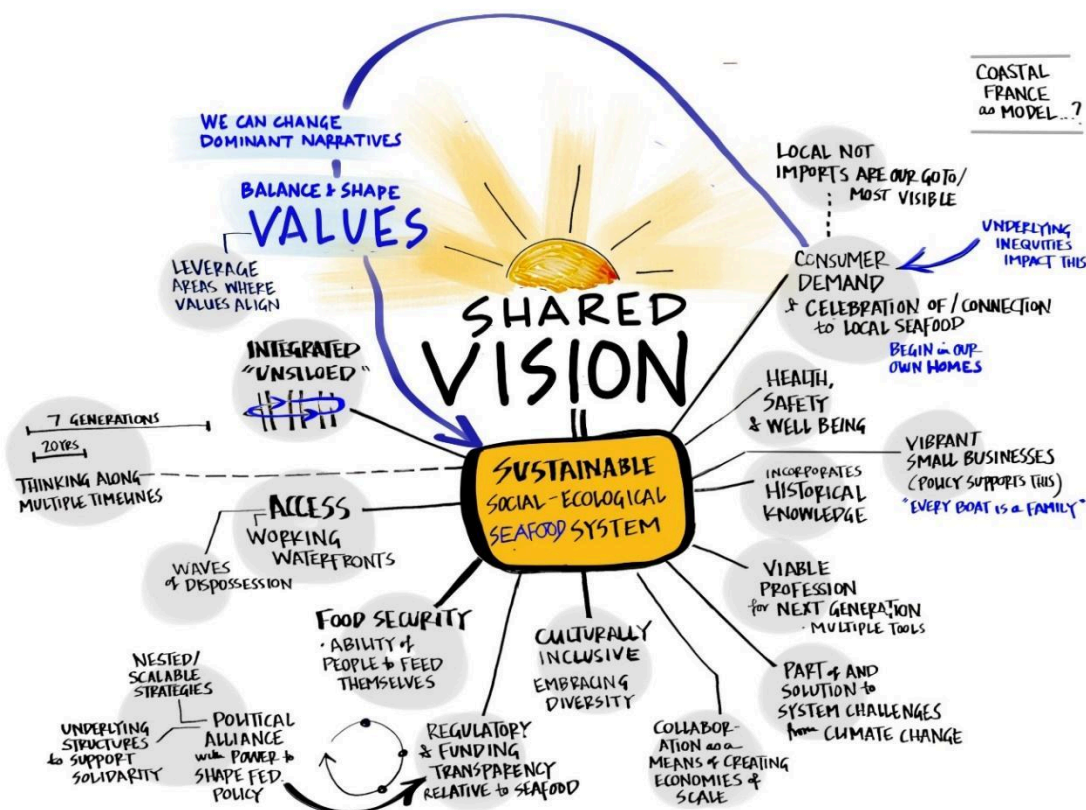


Figure 2. Our Shared Vision for the Future of Local and Regional Seafood Systems

The following section offers a detailed overview of this visioning exercise, with the group's collective vision organized in four broad categories: Community Strength and Support, Consumer Access and

Awareness, Environmental Justice and Stewardship, and Government Support. Participants completed the prompt “*Within 20 years, we envision a world in which...*”.

COMMUNITY STRENGTH AND SUPPORT

- **Working waterfronts are accessible to local fishing communities:** Infrastructure for fishing operations is properly maintained and accessible to local communities. Additionally, affordable housing options exist in waterfront communities so that fishermen or others involved in seafood and fisheries work can live where they work. This access to working waterfronts ultimately maintains and strengthens the cultural identity and character of local fishing communities.
- **Young people are engaged in fisheries work:** The knowledge and history of fisheries is communicated to the next generation of fishermen. Young people are interested in pursuing fishing work, and the barriers to entering local-level fishing work are reduced.
- **Local livelihoods of fishermen are supported:** Local and regional economies support and value their place-based fishermen and seafood businesses, and fishermen have access to quality mental and physical health services.
- **Local processing options are accessible to local and regional fishing operations:** Smaller fishing operations and harvesters have access to processing services that are local, scale-appropriate, and affordable.

CONSUMER ACCESS AND AWARENESS

- **Seafood (and all food) is accessible and available to local communities first:** Seafood is made available and affordable for local communities before it is distributed to broader markets for purchase and/or processing. Systems for distributing seafood to local, inland, and rural communities are strengthened.
- **Consumers understand where their fish comes from and value local seafood:** More fishermen market their catch directly to consumers, enhancing supply chain transparency and consumer confidence in their seafood. Additionally, consumers see the value and care that goes into local seafood and are willing to prioritize local products, even at a higher price point.

ENVIRONMENTAL JUSTICE AND STEWARDSHIP

- **Ecosystem health is prioritized and stewardship is strengthened:** Marine ecosystems are healthy, sustainably used, and preserved for generations to come. Fishermen (who are deeply invested in the health of oceans) and other resource users are environmental stewards invested in sustainable management, and environmental health is recognized as a benchmark of success across industries that touch seafood.
- **Equity and justice are elevated in local and regional seafood systems:** Treaty fishing rights are affirmed and strengthened along with resource and seafood access for other historically marginalized groups. Diverse seafood cultures are celebrated, supporting consumer education by raising awareness of diverse cuts and fish that are regionally or seasonally available.

GOVERNMENT SUPPORT

- **Seafood is elevated in the national food system:** Fisheries and fishing communities are recognized and integrated within the broader food system. Silos in the current food system are broken down, and funding for seafood through USDA is more clearly established and accessible.

ENABLING CONDITIONS AND OTHER CONSIDERATIONS

In addition to outlining a vision for the future of local and regional seafood systems, participants highlighted enabling conditions to support the envisioned future as well as other important considerations for working towards that shared vision.

- **Leverage existing societal values for mindset and behavior change:** Shifting the mindsets of decision makers and consumers is critical to building a vibrant, sustainable local and regional seafood system. Our society increasingly values sustainable and nutritious food as well as family-run, local businesses. Leaning into these existing values helps make the case for local and regional seafood.
- **Limits of consumer demand as a driving force:** Although demand is an important element of consumption, there are systemic factors that prevent people from buying local and regional seafood. Price points can force lower-income communities in our current system to purchase imported fish from the supermarket, or not purchase seafood at all.
- **Working within the current system versus creating something new:** There are different pathways for changing the current local and regional seafood system. Efforts to support local seafood and fisheries can operate within the current system (e.g., amend existing policies or carve out opportunities to strengthen local and regional seafood within the current global, consolidated markets), or they can create opportunities for local and regional seafood and fisheries that are outside of that system (e.g., create processing options specifically for local and regional operations, etc.). Depending on the intervention, different pathways may be more appropriate or effective in certain situations.
- **Political alliances and coalitions to achieve our shared vision through federal policy:** Working with existing policies and regulations may be more efficient and effective than working outside the current system (e.g., trying to pass new policies). We also heard that policies are nested from the federal level down to the state and municipal levels, and that understanding which levers should be pulled to spur change within this ecosystem is essential.
- **Defining “community”:** Community is an essential consideration for local and regional systems; however, assumptions about what community entails are common. Community is not a monolith and can mean different things depending on the context. For example, waterfront communities often consist of affluent individuals who do not work in fisheries or seafood. Thus, specifying who is being referenced or included in communities (in the working waterfront and beyond) is important.

Affirming Barriers and Challenges in the Current System

The University of Maine team presented major barriers and challenges to a vibrant local and regional seafood system that emerged from a series of focus groups they held that gathered input from a diverse cross section of local and regional fisheries in the United States. Workshop participants were asked to affirm these barriers and challenges, identify potential gaps, and share whether the barriers were appropriately organized by their significance (in their experience).

Figure 3 depicts the barriers presented to workshop participants along with the revisions and comments that were shared during this session, displayed in a spectrum from “three rock” barriers (barriers that were mentioned most frequently and in the most negative context during the focus groups) to “one rock” barriers (barriers that were mentioned less frequently in a less negative context).



Figure 3. Barriers and Challenges to a Vibrant Local and Regional Seafood System

Additional information from this session, including clarifications about what was captured under specific barriers and highlights from group conversation, are captured below.

“THREE ROCK” BARRIERS

- **Regulations:** Regulatory challenges include the number of regulations that fishermen are forced to navigate, fishermen’s ability to keep up with and understand regulations, the disconnect between regulations and lived realities, and the patchwork regulatory landscape of NOAA and USDA jurisdiction.
- **Coastal access:** Loss of key access points and infrastructure for seafood harvesters is prevalent. Reframing “coastal access” as “ocean and fishing ground access” expands this barrier to include freshwater systems and access to ocean space beyond the shoreline due to other ocean uses (e.g., wind turbines, privatization, and competing industries).
- **Foreign imports:** Local seafood faces pricing challenges when competing with foreign imported seafood. Communicating the value of local seafood is critical, because it often cannot compete with foreign imports (or other protein sources) solely on price.

- **Community erosion:** Key barriers that fishing communities experience include loss of year-round populations, mental health struggles, addiction, and loss of community spaces and connectivity.
- **Disasters:** Shocks to the system or disasters can be both environmental and non-environmental (e.g., covid, storms, and oil spills). Participants flagged that unexpected disasters can often trigger other barriers and challenges.

“TWO ROCK” BARRIERS

- **Sustainability information:** It is challenging (but critical) to communicate nuanced information about seafood sustainability and help consumers understand that seafood is neither “good” or “bad,” but that there can be a spectrum of sustainability impacts from seafood depending on fishing practices, where it is sourced from, how it is processed, and how it is transported.
- **Discrimination:** This barrier refers to discrimination against Tribes, racism, classism, sexism, and worker discrimination associated with fisheries and seafood work. Additionally, it captures the exploitation of immigrant workers.
- **Consumer demand:** Consumers’ willingness and capacity to buy local and regional seafood contributes to overall consumer demand.

“ONE ROCK” BARRIERS

- **Food quality and safety:** The food safety landscape is dynamic and often shifting to account for new diseases, contamination issues, or climate change considerations.
- **Food insecurity:** Food sovereignty was emphasized as a barrier related to food insecurity (especially for tribal communities). Additionally, elitism around food can obstruct the use of seafood for addressing food insecurity.
- **Lack of technical assistance:** Small businesses and operations face financial challenges (e.g., accessing funding) and informational or resource challenges associated with running a seafood business.
- **Energy:** Energy costs are rising, and the inability of local or regional seafood systems to transition towards efficient, equitable, and sustainable energy is a key challenge. Other industries are working towards the energy revolution, and participants expressed concern that fisheries would be left behind (while noting that green energy transitions may have broader implications on fisheries work in some situations, e.g., offshore wind).
- **Seafood fraud:** Mislabeling (e.g., country of origin, species) results in consumer confusion around unfair competition with lower priced seafood for local and regional seafood.

Mapping the Current System

Based on interest and energy from the group, four “focal themes” emerged for further discussion: Disaster Preparedness, Working Waterfronts, Consumer Demand and Equitable Access, and Harvester Access to Aquatic Resources. Using these areas as starting points, participants visually mapped the various “factors” at work in the system and how they are interrelated (see Figure 4 for an example of a system map generated by Workshop participants). This exercise supported a nuanced understanding of the current local and regional seafood system and how it functions, highlighting areas where change on a particular element could have enhanced impact that reverberates across the system. The following section summarizes key findings from the systems mapping exercise and insights from the subsequent group conversation.

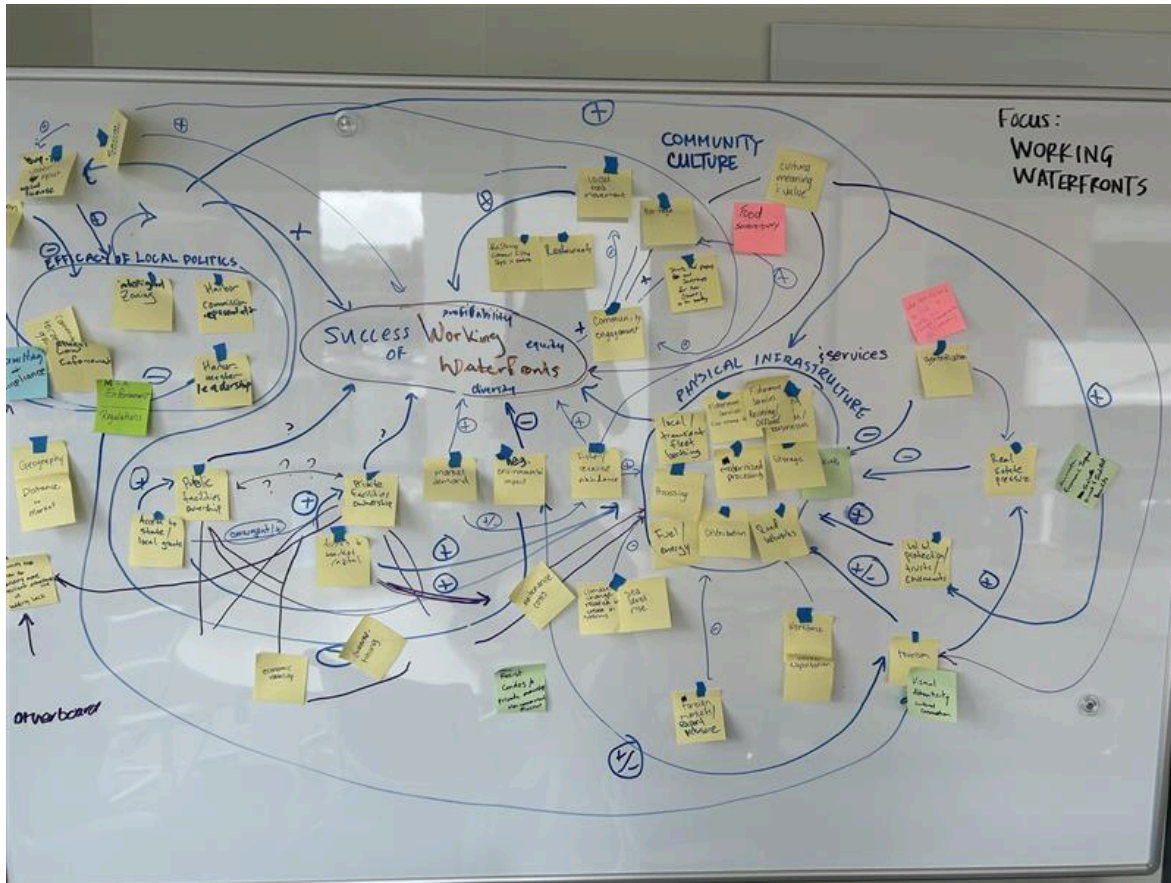


Figure 4. Systems Map Example

DISASTER PREPAREDNESS

- **Proactive disaster planning is key to a robust response:** Trust, transparency, and community engagement are critical elements of disaster preparedness. Proactively engaging communities and scientists in disaster preparedness planning can help to support robust and adaptive responses to storms or other natural disasters. A resilience playbook is needed so that impacted communities aren't always reacting to disasters but can rather "get ready and stay ready."
- **Support at multiple scales (from federal- to community-level) enables adaptive, nimble disaster responses:** Nested and hyperlocal systems that allow impacted harvesters to move their fish into systems that aren't experiencing an active disaster situation are critical. This structure can support small-scale operations and buffer against negative market impacts by providing avenues to sell fish locally. Private and community-based (e.g., mutual aid) responses can be nimbler than federal funding for disaster relief.
- **Engage communities to provide culturally appropriate support:** Support must be tailored to the needs and experiences of the local community (e.g., offering culturally relevant food in disaster situations). This consideration is critical at the local, state, and federal levels. Additionally, community engagement and education efforts may be necessary to support this need, and community networks need to be prepared to play the role of "first responder" in disaster situations.

- **Build resilient systems to enhance disaster preparedness:** Physical infrastructure and ecosystems influence the impact of natural disasters. Building climate ready infrastructure and supporting ecosystem health contributes to the resilience of coastal communities and can help to mitigate the impact of natural disasters.

WORKING WATERFRONTS

- **Ownership of the working waterfront impacts maintenance of and access to infrastructure:** Upkeep and maintenance costs can be expensive for some private owners of working waterfront infrastructure (e.g., docks). Seafood systems rely on shared infrastructure more than land-based agriculture, resulting in unique considerations for this industry in terms of opportunities to coordinate across sectors. Ownership and access specific to the experience of Tribes is also important to distinguish and consider, as Tribal lands are held in trust by the government and not directly owned by Tribes.
- **Indirect impacts and benefits of the working waterfront:** Maintaining livable communities and affordable housing along the working waterfront is essential for the wellbeing of fisheries and seafood workers and for preserving the culture, character, and local heritage of those spaces. Additionally, waterfront areas can drive local tourism.
- **Inflexible permitting does not incentivize resilient working waterfront infrastructure:** Onerous permitting processes and limited access to funding force owners of damaged infrastructure to weigh the need to rebuild quickly so as not to miss a fishing season, versus navigating the lengthy permitting process to build back resiliently. Additionally, titling can be invoked as a mechanism to dispose of local fishermen or operators of their access rights.

CONSUMER DEMAND AND EQUITABLE ACCESS

- **Define “local” in the small-scale local seafood and fisheries context:** Definitions of “local” are inconsistent across parties and contexts. For example, USDA has a wide radius for what products are considered local, and in the case of Bristol Bay, fish are sold not only locally but to more distant geographies as well.
- **Combat seafood fraud to support consumer confidence:** Greater education and information sharing is needed to address seafood fraud and mislabeling or misrepresentation of what is “local” seafood. Messaging should be community-driven to support authenticity and accuracy, and stakeholders across different areas of the seafood industry need to understand and be able to communicate that messaging. Some examples of how local seafood can be promoted include using online marketing opportunities to provide additional context and recipes, or displaying images of local fishermen on packaging.
- **Consider demand, access, and markets in management decisions:** The types of fish that fishermen can harvest are dictated by a management system that does not meaningfully account for consumption and is not optimized for market success. Current policies (e.g., the Magnuson Stevens Act) reinforce this disconnect, and the fact that NOAA manages fisheries but not fish contributes to these management issues.
 - **Harvester access:** Harvester access (physical access, access to infrastructure, and fishing rights) and consumer access should be tightly coupled because management decisions have the capacity to impact the quality and type of fish distributed to the public.
 - **Sports fisheries management:** In some areas, management allows sport fishers to fish on the anticipated return while allowing Tribes to fish on the salmon that return to the

tributary. This gives sport fishers priority access and forces Tribes to “fight for paper fish” that may not be accurately accounted for in management plans.

HARVESTER ACCESS TO AQUATIC RESOURCES

- **Match management with realities:** Management is disconnected from the needs of the fleet in some regions. Fixing management at the state level is key to influencing meaningful change and building a system that supports local and regional seafood systems. Additionally, Tribal sovereignty and the federal government are important to consider in the management conversation. For example, states sometimes manage fisheries for sport fishers (who buy licenses and provide revenue to the state) and devalue Tribes in management decisions.
- **Manage fisheries as part of the food system:** Expanding the management of fisheries to consider them as part of the food system could change how success is interpreted, measured, and managed for in the fisheries context.

Identifying Impact Areas and Articulating Pathways

Drawing on their four systems maps, participants selected eight high-impact focus areas for solution-building. To select these impact areas, participants considered (1) elements which appeared on multiple maps, and (2) elements which were highly interconnected and could influence cascading change with targeted interventions. These eight areas of focus included:

1. State and Local Commitment to Ensuring and Maintaining Infrastructure and Cultural Identity
2. Narratives for Educating Consumers
3. Community Voices Involved in Policy Decisions
4. Formal or Informal Networks for Support
5. Facilities and Infrastructure that Include Off and On Ramps⁴ at Appropriate Scales
6. Ownership of Facilities Supports Local Food
7. Access to Public and Private Capital, Informed by those who Need it
8. Policies Value Fisheries as Foods

Participants then brainstormed interventions and actions that offered potential pathways for addressing these high-impact areas and influencing change in the current local and regional seafood system. See Appendix A for the full transcription of interventions, examples, and success stories discussed during this session.

The following action plans were workshopped by participants and informed by the brainstormed interventions. Each action plan specifies a proposed intervention, the impact that action is intended to support, reference examples or models to follow, partners who would need to be engaged in the solutions, and at what scale (federal, state, local, tribal) and what timeline (short-term, medium-term, long-term) the intervention could be enacted.

A high-level overview of the interventions and impacts outlined in the proposed action plans are articulated here. See the full action plans in Appendix B.

⁴ Opportunities to help local and regional fishermen or operators get their catch to communities.

1. **State and Local Commitment to Ensuring and Maintaining Infrastructure and Cultural Identity:** Creating affordable housing options enables seafood industry workers to live where they work, and establishing collaborative facilities combats the consolidation and loss of infrastructure. Both of these interventions facilitate local access to housing and infrastructure and preserve the maritime culture of working waterfront communities.
2. **Narratives for Educating Consumers:** Proposed actions to bolster consumers' confidence that their choices and values are aligned include developing tools to enhance the transparency and traceability of local seafood and establishing a regionally coordinated marketing strategy to make information clear and accessible.
3. **Community Voices Involved in Policy Decisions:** Suggestions for elevating community perspectives in the policy process include establishing a liaison at NOAA or other agencies, and creating technologies that make it easier for fishermen to understand and stay up to date on their grants. Integrating the needs and perspectives of fishermen or other seafood and fisheries workers early in the decision-making process is essential for building understanding of policies and programs, and making those programs accessible to the people who rely on them.
4. **Formal or Informal Networks for Support:** Proposed actions for cultivating a knowledgeable, prepared, and empowered workforce include integrating community needs into the development of programs and supporting formal and/or informal mentorship and networks.
5. **Facilities and Infrastructure that Include Off and On Ramps at Appropriate Scales:** Proposed actions for getting seafood to local communities included addressing regulatory disconnects and establishing cooperative processing and facility options. Additionally, participants recommended strengthening the business case for non-commodity seafood as a strategy to foster greater understanding of the multi-benefit outcomes of non-commodity seafood.
6. **Ownership of Facilities Supports Local Food:** Recommendations for supporting the maintenance of seafood and fisheries infrastructure, improving access to local seafood, and empowering local operations include establishing trusts for fishing docks and setting up shared use, cooperative facilities.
7. **Access to Public and Private Capital, Informed by Those Who Need It:** Programs and interventions that identify creative uses for public and private dollars to strengthen local fishing communities include state food security infrastructure programs, affordable housing options, mentorship and network programs that support knowledge sharing and wellbeing, and insurance programs for disaster relief.
8. **Policies Value Fisheries as Foods:** Proposed actions for integrating fisheries and seafood into policies, recognizing seafood as a critical component of the food system, and expanding funding and resources available for seafood and fisheries include establishing a Seafood Title in the 2028 Farm Bill and strengthening political advocacy for local and regional seafood and fisheries.

Final Reflections

In the final session, participants discussed the action plans and shared general reflections on the Seafood Nexus Workshop. Key takeaways that participants shared include:

- **There is existing work to build upon:** Current initiatives and success stories can provide a foundation for this work going forward. Identifying and leveraging such efforts (including the examples and references shared throughout the Seafood Nexus Workshop) can support efficient and effective solutions.

- **Recurring themes and needs emerged from the workshop:** Some ideas and interventions were raised multiple times throughout the workshop and potentially offer priority objectives to work towards. Repeatedly flagged opportunities and impact areas include:
 - **Affordable housing:** Affordable housing is a key issue for not only fisheries and seafood workers, but for other groups as well. Thus, there could be coalition power to drive progress on this issue and identify affordable housing solutions to support working waterfront communities.
 - **Cooperative facilities:** Establishing cooperative facilities and joint ownership or use models were frequently suggested as a strategy for combating consolidation and privatization in the seafood industry.
 - **Mindset shift:** Changing hearts and minds has the potential to spur cascading societal change. Thus, amplifying the voices of individuals involved in local and regional fisheries and seafood work and controlling the narrative around local seafood is essential for supporting seafood consumption. Some participants suggested that there are low-risk and low-investment opportunities for enhancing these communications efforts, such as strengthening social media promotion and online markets.
 - **Farm Bill:** Establishing a Seafood Title in the 2028 Farm Bill is an opportunity to improve local and regional seafood and fisheries where there was significant energy. Although it would take effort, integrating seafood in the Farm Bill is an attainable goal to work towards that could have significant impacts, including strengthening seafood in USDA programming and funding initiatives.

WHAT'S NEXT?

The University of Maine team emphasized that this workshop is part of a larger information gathering effort that includes a literature review, case studies, and focus groups towards identifying key needs and interventions for a National Action Plan to strengthen local and regional seafood systems, with the goal of finalizing this plan by spring of 2025. There will be opportunities during the drafting of the National Action plan for Workshop participants' and their collaborators' input, and the University of Maine team flagged that they are specifically interested in engaging perspectives that are historically underrepresented or have been underrepresented in the process thus far (e.g., tribal communities, US West Coast (not including Alaska), and the Southeast or Gulf States). The University of Maine team aims to have a draft national Action Plan for input in November, 2024.

In the meantime, other opportunities to stay engaged:

- **Be a Surf & Turf Podcast Guest:** Caroline invited the group to reach out if they are interested in being a guest on the Surf & Turf Podcast, which is focused on seafood justice in the US.
- **Join the Local Catch Network (LCN):** Josh invited workshop participants to become a LCN member, join the LCN Listserv, and sign up for the 2025 seafood summit.
- **Stay connected with one another:** the University of Maine team encouraged the group to maintain the connections built during this workshop (contact information for members is included in the participant list).

Appendix A | Actions, Interventions, and Successes

Transcription of the actions, interventions, and successes that Workshop participants brainstormed and shared with the group:

1) STATE AND LOCAL COMMITMENT TO ENSURING AND MAINTAINING INFRASTRUCTURE AND CULTURAL IDENTITY

- Equitable mitigation assistance through restoration
- Tax incentives (state, federal, local)
- State law for trusts/covenants for working waterfront preservation
- Local/state recognition, permission to continue tribal/local fishing techniques (law?)
- Municipal zoning preserving areas for marine industry and building back better for climate mitigation
- State and federal funding for public purchase of docks
- Create workforce housing (e.g., housing trusts) (celebrate and encourage the trade(s) i.e. supporting industry)
- Municipal comprehensive planning
- county -level disaster planning
- State incentives for local climate adaptation for infrastructure
- Supporting new small businesses, secondary income focusing on cultural diversity
- Having appropriate facilities for area i.e. community kitchen value added
- Accommodate festivals and special events to enjoy, highlight, and revere local products
- Recognize value of local industry and cultural knowledge
- Balance economic development for wild and farmed products

2) NARRATIVES FOR EDUCATING CONSUMERS SHAPED BY INFLUENCERS

- GMRI and NAMA have culturally appropriate local seafood guides
- Emphasizing “place, taste and harvesters” through strategic marketing, examples in AK
- Network of local/regional partners to work with marketing firm (e.g., regional marketing initiatives), supported by funders
- Nationwide public campaign shrimp crisis vs accountability
- Harness positive influence of celebrity chef ambassadors on social media and streaming platforms
- Grassroots trade publications
- Target sellers; grocery + restaurants interface with consumers
- Objective transparency in media campaigns
- More consideration and research into what messaging benefits who (e.g., farmed vs wild healthy benefits)
- Social media tools/campaigns that engage through easy language and faces that are local
- Seasonal/regional seafood guide/calendar
- Policy accountability by food providers to identify food source
- Mandatory seafood labeling (which some states already have)
- State and local government seafood and promotional board to market out “product” and the value of our “industry”
- AI fish ID app to empower consumers and potentially reduce seafood fraud/misinformation

- System to afford greater boat to plate differentiation and traceability
- Make our customers feel AWESOME about their choice. (guilt free consumerism)

3) COMMUNITY VOICES INVOLVED IN POLICY DECISIONS (CO-MANAGEMENT)

- Being the honest broker → educating both sides of the issue
- Work proactive - read, understand management language, help others to get involved by education and experience
- 2 way communication avenues - different for in-season & out of season (share real-time info from fishing grounds)
- Tribes need to be at the table in management and policy (if we are not at the table then we're on the menu)
- Local/regional boards of governance advising upstream to policymakers
- Prioritize informing local decision makers/organizations. Business to business networking
- Timing of meetings - don't make harvesters give up time on the water to be present
- Revisit some of the vessel size HP correlations for permits shifting address emerging species
- Federal program and funding implemented through cooperating federal/regional administration
- Visuals, social media reels, examples of how supporting policy for local food systems benefits individuals and other community stakeholders
- Help communities organize themselves so we are prepared to meaningfully engage with policy makers (can include conflicting user groups)

4) FORMAL/INFORMAL NETWORKS FOR SUPPORT (KNOWLEDGE, TRAINING, PLANNING, DISTRIBUTION)

- Think outside seafood, what can we learn from other sectors and apply?
- The power of collaboration/partnerships . delgado fisheries job training + learning from unconventional partners, environmental NGOs
- Make connections and relations with others that are involved in your cause to develop better networks with their knowledge to move forward to the planning
- Funding for existing networks and organizations providing services
- Networks that bridge existing organizations to learning and exchange
- Clear rules and local and state for legally selling seafood (small scale) in land states too!
- Customer relationship building non seafood organization membership/network
- Create new or enhance existing online communities that allow for distribution of ideas, problems, celebrations + shared benefit of local food systems (reddit, FB groups, youtube)

5) FACILITIES AND INFRASTRUCTURE THAT INCLUDE OFF/ON RAMPS AT APPROPRIATE SCALES

- Fisherman owned cooperative - direct market membership food banks supported by private investment and reimbursement state funds.
- Collaborative work between public and private facilities as villages with private stakeholders
- Utilize existing infrastructure that have storage/distribution in place and have capacity /need rev. to supplement operating costs (e.g., gallatin valley food bank)
- regional/state marketing institutes/ organizations
- utilization/partnership with university food science and engineering programs
- Policymaker networking

- National initiative to build processing infrastructures pre export (top creation fed funded)
- Creation of local/regional economic development (cedc; love, live, local)
- Southeast LA: no docks, no seafood industry
- Incentives for processors and food co's to do local product runs
- Make it easier for cold storage to house multiple food streams (alt seasons fish vs veggies)
- local/state policies that support small-scale, direct marketing
- Drop points, lockers, node distribution
- Shipped seafood/home delivery/ ecommerce
- More transparent to inventory lists and price points
- Use institutional buying to anchor demand

6) POLICIES VALUE FISHERIES AS FOODS

- MSA amendments to insert seafood
- Seafood title/subtitle in the 2008 farm bill
- Mechanisms for valuing ecosystem services of local/regional fish/food systems
- USDA partnerships/engagement
- Fishers recognizing their important in food system to collaborate with policy makers
- Creation of senior advisors at NOAA for local and community-based seafood/food system (Josh)
- Create explicit food systems research program and funding
- Assessment of current policy/regulatory connections to food systems (identification of gaps)
- Ensure national standard of guidelines one reflective of fish as food
- Hire people with food systems + nutrition training (tufts, etc)
- Unified lobbying efforts by industry to educate consumers and lawmakers
- Understanding fishing communities businesses and way of life
- Political directive to implement all components of magnuson stevens with emphasis on food systems elements. Do better with the legislation that is in place
- Better "indicators"
- Cross agency office of seafood
- Recognize cultural relevance of seafood (salcon) that Tribes maintain
- Policies that recognize food justice and sovereignty as a core part of the seafood system
- Quota set aside for local/regional food distribution
- Implementing language of food security, sovereignty, self-reliance on domestic seafood
- More inclusive and broadened pictures of economic impacts of commercial fishing vs simply x-vessel value (tracking restaurants, markets, culture, security, tourism)

7) OWNERSHIP OF FACILITIES SUPPORTS LOCAL FOOD

- Shared use (processing/storage) facility (central coast food web - amanda) (mission mt food enterprise center)
- Support privately-owned wharf with marine, lobster pound (?) and seafood restaurant. Supports inshore and offshore lobster, clam diggers, and oyster farmers. Consumers have access to locally harvested food
- Connecting family owned to facilitate public ownership
- State program for permanent working waterfront designation

- State grants to publicly own/maintain docks, etc.
- fisherman / family owned collaborations and coops
- % Hillary → housing/social services for workforce
- Bring back water access to fisheries, relocate the owners that can support local seafood chain (ports, markets, training)
- Special food focused events, food truck activity around facilities

8) ACCESS TO PUBLIC AND PRIVATE CAPITAL, INFORMED B THOSE WHO NEED IT

- Rolling fishery loan program and fishery emergency fund
- Offset public costs with private funding (Chatham Home Foundation)
- Capital in the form of equipment and infrastructure (i.e. shared trucking, ice, refrigeration, freezers)
- Expand eligibility for different pots of \$ → more ways to flow \$ to private or coops
- Planning + execute with less bureaucracy or agency intervention
- Access to usda grants for sustainable food source
- Scale appropriate grants and financing options (e.g., easy to access low barrier small grants for small producers)
- Funds to provide match dollars for small orgs
- Eliminate barriers (matching funds) that hurt in applying for funds (Buck) + 1 Vanessa
- More \$ for implementation (not just planning)
- State food security programs - set aside seafood providers
- Easier access to SBA loans for fisheries
- Build your best business model and work it, look at what works in other businesses
- Insurance pools, disaster insurance for fisheries (like crop insurance?), health, physical infrastructure
- Business acumen/financial management vis a vi mentorship! Business owners often need help managing money after acquiring
- Bring back foundation support for US fisheries

Appendix B | Action Plans

Workshop participants articulated action plans for addressing the high-impact focus areas. For each proposed intervention or solution, participants captured the anticipated impact, reference examples or models to inform the proposed interventions, partners to be included in the solution, and at what scale (national, state, local, Tribal) and in what timeframe (short-, mid-, long-term) the intervention could be enacted.

1 | State and Local Commitment to Ensuring and Maintaining Infrastructure and Cultural Identity

1.1 Intervention	Create affordable housing options (seasonal, rentals, ownership) for people working in the seafood industry.
Impact	Gentrification in waterfront fishing communities is addressed, enabling seafood industry workers to live where they work and strengthening the local workforce.

Reference	Mount Desert Island Housing Trust; Changing zoning for multi-family or higher-density use.
Partners	Nonprofits, employers, municipalities, fishermen/maritime industry workers, lawmakers.
Scale and Timing	Local-scale, mid-term intervention.

1.2 Intervention	Build scale-appropriate, collaborative facilities (e.g., commercial kitchens, freezer facilities, retail, etc.).
Impact	Small and emerging seafood businesses are supported at the local level, and the current loss and consolidation of infrastructure is combatted. The visibility of maritime culture is heightened, and local and regional value chains are more resilient.
References	Ecostrust Redd; Prospect Harbor, ME (former cannery, now a multi-use space); Portland, ME (Lady Shuckers—former cannery offering a multi use space); Crescent City, CA (shipping container processing plant).
Partners	Investors, technical experts, non-profits, small and emerging businesses, champions in local government.
Scale and Timing	Local-scale, mid-term intervention.

2 | Narratives for Educating Consumers

2.1 Intervention	Develop tools to enhance transparency and traceability that are accessible and accurate for producers and consumers.
Impact	Consumer awareness is elevated, and they have greater confidence that their choices and values are aligned. Seafood fraud issues are addressed, supporting ecological sustainability and increasing demand for local and sustainable seafood.
Reference	GMRI Cultural Guide, AI fish App, labeling and certification (country of origin, state, region); LA restaurant requires fish origin to be shown.
Partners	Tech industry (app support), harvesters, producers, third party verifiers (could be integrated into existing or broader food verification programs).
Scale and Timing	Near- and mid-term intervention.

2.2 Intervention	Establish a regionally coordinated marketing initiative or body that supports local and regional seafood through diverse media engagement and educational content.
Impact	Lesser known species are elevated, tribal products are supported, and new markets are opened. Local communities are more connected with local products and recognize the value from the harvesters to the final product (boat to plate).
Reference	ASMI (Alaska); BBRSDA (Bristol Bay Sockeye); Eat Oregon Seafood (OSU); Rhode Island Initiative.
Partners	States, harvesters, universities/Sea Grant, consumers, non-profits, funders.
Scale and Timing	Regional-level, near-term intervention.

3 | Community Voices Involved in Policy Decisions

3.1 Intervention	Establish liaisons at NOAA and other agencies to represent and consult on behalf of their community or sector.
Impact	Community members and Tribes have a seat at the table, and policy decisions are informed by a diversity of perspectives and experiences. Additionally, integrating community representatives in policy decisions would help to translate policy to communities, offers communities a contact for navigating complex issues, and build understanding of rules and regulations.
Reference	Senior advisor or coordinator positions at NOAA for recreational fishing.
Partners	Community representatives (who are accessible to their communities), Tribal representatives.
Scale and Timing	Federal-level, near-term intervention.

3.2 Intervention	Develop technology that is accessible and useful for fishermen.
Impact	Technology costs are ultimately reduced for fishermen, and fishermen have an easy way to stay updated on the status of their grants.
Reference	Participants described examples related to Fishermen's Portal, broadband, and trainings.

Partners	New and experienced fishermen, developers and designers, researchers.
Scale and Timing	Multiscale, near-term intervention.

4 | Formal or Informal Networks for Support

4.1 Intervention	Build programs to support the workforce that are driven by community needs (e.g., business acumen/financial skills, youth training, mentorship, etc.).
Impact	The creation of a knowledgeable, prepared, and empowered workforce.
Reference	Delgado (training stipend, accommodating for fishermen, training the workforce); Young Fishermen's Development Act; Culinary training collaboration with universities to support the preparation of local, fresh, diverse cuts of seafood.
Partners	Experts, industry mentors, school educators, community leaders.
Scale and Timing	Local-scale, near-term intervention.

5 | Facilities and Infrastructure that Include Off and On Ramps at Appropriate Scales

5.1 Intervention	Commission business case analysis for non-commodity seafood and develop the economic argument for supporting this side of the seafood industry.
Impact	Stronger understanding of the economic benefits, health outcomes, and ecosystem services associated with local, short-value chain, non-commodity seafood.
Reference	Energy Power Plant Citing
Partners	Right firm, funders, knowledge sources.
Scale and Timing	National and regional analysis with local case studies conducted in the near-term.

5.2 Intervention	Establish a cooperative processing facility for processing and storage that includes a kitchen that allows for value added innovation on consumer-ready products. This could include food trucks or other chef-created products that are attached to the facility.
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Impact	Shipping needs are reduced, and fresh, nutritional products are distributed locally and made more approachable. Additionally, jobs associated with these facilities are created.
Reference	Jessup, MD shared fish warehouse space (state funded); Fulton's Fish Market; Toyosu Fish Market (Tokyo).
Partners	Fishermen, Producers, Processors, Chefs, Entrepreneurs, marketing experts.
Scale and Timing	State-level, near-term intervention.

5.3 Intervention	Develop a local food initiative or collective with refrigerated lockers for storage and distribution.
Impact	Access to seafood is more affordable, direct, and efficient. Local demand is supported, communities are more connected to their local seafood, and it is easier to transport local seafood inland.
Reference	Amazon lockers, refrigerated local distribution sites.
Partners	Engineers, developers, ecommerce platforms, digital marketing organizations.
Scale and Timing	State- and local-level, near-term intervention.

5.4 Intervention	Harmonize policy and regulatory disconnects across different regulating agencies.
Impact	There are more off and on ramps for local fish, or more opportunities to get fish to people. In the current system, business to consumer is regulated by the local health department while business to business is regulated by state agriculture. Harmonizing these different value adds to products could address issues with separation of spaces and coolers, and reduce red tape on interstate trade and scalability.
Reference	HACCP Reach and Implementation.
Partners	Health Department, State and US Agriculture.
Scale and Timing	Near-term intervention with national- or state-scale coordination.

6 | Ownership of Facilities Supports Local Food

6.1 Intervention	Establish a trust for fishing docks that includes working waterfront easements and is funded through advocacy programs that assist transitions from docks that are privately owned to docks that are publicly held and maintained for the purpose of supporting seafood in perpetuity.
Impact	Docks and shorelines are maintained, and the character and resilience of local communities is protected. Services associated with docks and shorelines are strengthened. Access to local seafood is strengthened.
Reference	Public Land Trust, Maine County Trust.
Partners	Municipal government.
Scale and Timing	Multiscale intervention.

6.2 Intervention	Set up a shared use, cooperative facility for processing and storage.
Impact	Small businesses are empowered and enabled to provide seafood options to local communities. This cooperative structure could help small businesses collaborate to fill larger orders and reduce the initial risk of investing in operational start-up costs.
Reference	Central Coast Food Web, Chatham Harvesters' Coop, SD Fisherman's Coop, Kitchen Incubators.
Partners	Federal permitting (dealers), local permitting (processing/harvest), privately owned buildings leased through a non-profit (taking advantage of existing infrastructure).
Scale and Timing	Multiscale intervention.

7 | Access to Public and Private Capital, Informed by Those Who Neet It

7.1 Intervention	Establish state food security infrastructure programs including an infrastructure reimbursement fund for outboard motors, refrigerated trucks processing, etc.
Impact	Local seafood is abundant and accessible, and "gateway" communities who are vulnerable or experiencing food insecurity have access to seafood.
Reference	Massachusetts Local Food Plan or food security grant program.
Partners	Fishing businesses seeking infrastructure, Department of Agriculture, Division of Marine Fisheries,

Scale and Timing	Multiscale, near-term intervention.
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7.2 Intervention	Channel private funding to offset the public costs of affordable and/or middle-income housing options.
Impact	Affordable housing options and ownership opportunities are available for the fishing community in situations where the market does not support affordable housing rates.
Reference	Chatham Foundation (fundraising from wealthy second home owners, buy-downs with deed restrictions for year-round residents, offset municipal costs of building affordable housing).
Partners	Private sector (existing wealthy property owners), local municipalities, non-profits, real estate developers.
Scale and Timing	Local- or municipal-scale, near-term intervention.

7.3 Intervention	Expand LCN peer to peer mentorship program.
Impact	Small-scale, local seafood businesses are strengthened, and the connectedness and wellbeing of the fishing community is supported.
Reference	LCN SAIL and Catalyst programs.
Partners	Established mentors, small-scale producers.
Scale and Timing	Multiscale, near-term intervention.

7.4 Intervention	Create a disaster savings account relief program.
Impact	Rapid disaster relief is available to fishermen through an insurance program. This safety net strengthens financial and mental community wellbeing and bolsters local food security.
Reference	H.S.A. (tax free model, could either be modeled for individual or communal support).
Partners	Harvesters, industry, shoreside support/processors.

Scale and Timing	Federal- and state-level intervention in the near-or mid-term. Such a program could be set up as an individual support or a communal model.
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8 | Policies Value Fisheries as Foods

8.1 Intervention	Establish a Seafood Title in the 2028 Farm Bill
Impact	Local seafood is recognized as part of the food system within USDA and more broadly, and fishermen's needs are incorporated with USDA programming. Formalizing USDA support for seafood through the farm bill could also expand access to funding and resources (i.e., technical assistance, farm credit, food nutrition service, market research funding), and make commodity purchases (section 32 purchases) more equitable.
References	Organic Producers, National Sustainable Agriculture Coalition.
Partners	NOAA Fisheries (Data), Coastal members of Congress, a national consortium of values-aligned stakeholders and Tribes, one or more lobbying firms, one or more funders, staff-level agencies leading exchanges, campaign administrators and marketers, Office of Tribal Relations at USDA.
Scale and Timing	Federal-level, near-term intervention.

8.2 Intervention	Establish an advocacy organization with regional structure and national impact that is focused on local/regional seafood system policies (i.e., LCN).
Impact	Policy problems are easier to identify, solutions are advanced, a clearinghouse for policy discussions is established, and lobbyists advocate for adequate funding for small-scale, local seafood and fisheries.
Reference	National Sustainable Agriculture Coalition
Partners	Organizations that already exist, lobbyists, funders.
Scale and Timing	Federal- or regional-scale, mid-term intervention.