



Wendy Morrison National Marine Fisheries Service, NOAA 1315 East-West Highway, Room 13436 Silver Spring, MD 20910

Dear Ms. Morrison:

The Net Gains Alliance (NGA) is a non-partisan, independent initiative working to improve the collection, management, and use of data and information to enhance the benefits obtained from sustainable management of fisheries and marine ecosystems. We appreciate the opportunity to comment on the agency's Advance Notice of Proposed Rulemaking (ANPR) regarding potential changes to the implementing guidelines for National Standards, 4, 8, and 9 of the Magnuson-Stevens Fishery Conservation and Management Act (NS guidelines).

The NOAA Data Strategy states that data are foundational to the agency's mission. Data are the currency of fisheries science and management and necessary to monitor, anticipate, and respond to changing conditions. NS 4, 8, and 9 depend on trusted, timely, accessible data for implementation and the use of this data is explicitly cited in NS8. If NMFS proceeds with rulemaking we believe it's essential for the agency to look at the NS guidelines through the perspectives of what the agency's data systems can support technically, as well as what policies, data collection and management processes, and staffing would be needed to turn data into action consistent with these guidelines.

Actions taken to build resilience and adaptive capacity require science and management to be faster and more flexible, and are only as effective as the ability of people and data systems to support them. Our primary recommendation is for NMFS to continue investing in its data infrastructure and capacity to efficiently deliver science and management products to decision makers and partners, and anticipate the needs of climate-ready management in long-term data modernization planning.

Should the agency proceed with rulemaking to revise the National Standard 4, 8, and/or 9 guidelines, we believe the following topics should be considered.

Data confidentiality policy and the definition of fishing communities

The ANPR requests input on two key changes to the definition of a fishing community under the NS8 guidelines, including removing or revisiting the requirement for members to reside in a specific location and shifting the balance between consideration of dependence and engagement. Both of these changes would require deeper knowledge of individual fishing

activities, based on more detailed data about landings, crew, and business operations, among other demographic and socioeconomic factors. Under the current "rule of three" implementation of NMFS' confidentiality policy, this data may be difficult or impossible for NMFS staff to access, share across internal science and management teams, or use in collaboration with external research partners. Changing the definition of a fishing community could exacerbate the analytical challenges caused by current confidentiality policy, particularly in small ports, remote areas, and locations with a small number of fishery participants.

NMFS should consider how revisions to the NS guidelines intersect with the forthcoming confidentiality rulemaking and policy guidance to ensure these two areas of guidance complement and support one another. If NMFS decides to revise the community definition, it should provide guidance on what data will be used to make those determinations and how data will be shared among teams to do those analyses. NMFS may also want to consider guidance for establishing data partnerships with fishing organizations and external research partners that would support protected exchanges of sensitive business and personal information.

Data integration and interoperability

With regard to NS4, the ANPR requests feedback on the types of documentation, analyses, and alternative approaches that should be used when considering allocation decisions. The ability to quickly, efficiently integrate data from multiple fishery-dependent sources such as logbooks, observers, and electronic technologies is already important for documenting catch and landings—the basis of most allocation decisions—and will become even more important under allocation approaches that consider changing ocean conditions and new user groups. NMFS needs to continue investing in and improving data integration and interoperability so it's easy to link multiple records, and to share information both across teams within NMFS regions and among all NMFS regional offices and science centers.

Data interoperability and integration are also necessary for social and economic information. Responses to the agency's recently released Equity and Environmental Justice (EEJ) Strategy have raised the question of who comprises an underserved community and how these communities would be identified. Identifying and characterizing underserved communities would require enhanced social, economic, and demographic data that should be designed for interoperability from the start, particularly as climate change causes stocks and fishing effort to shift across static geographical and jurisdictional boundaries. Data used for the development and implementation of regional EEJ implementation plans should be accessible to and usable by researchers conducting allocation (NS4) and community dependence (NS8) analyses.

Access to spatial data

Information about how, where, and when fishing activity occurs is critically important to understanding how people and communities engage in and depend on fisheries, and how fish stocks and fishing effort are adapting to climate change. Spatial information is also critical to considering the impacts of management and allocation decisions, including impacts to communities—whether geographically defined, communities of practice, or underserved communities. However, spatial data on fishing are limited and difficult to access. NMFS should

consider how policies around data confidentiality and the accessibility of spatial data from VMS and other electronic technologies could support rather than hinder the analysis of the communities and places impacted by management and allocation decisions. Net Gains recently released a set of recommendations¹ for improving the accessibility of VMS data products.

Repeatability and shared documentation

Consistent with the August 2022 Office of Science and Technology Policy memo on "Free, Immediate, and Equitable Access to Federally Funded Research," NMFS has been developing an Open Data Plan and a Data Vision, covering both Fishery Independent Data (FID) and Fishery Dependent Data (FDD). As noted above, some FDD is restricted or treated as confidential, and other related data may have use restrictions per the Privacy or Freedom of Information Acts. Combining FDD, FID, and other data sources requires data scientists to develop workflows, do QA/QC, and write code in preparation for running models and reports. The types of novel analyses described in the ANPR would generate new tools and processes for data cleaning, aggregation, anonymization, and visualization and even if the underlying data cannot be open, these tools could be. Sharing code and best practices across NMFS, or more broadly, would improve repeatability and potentially accelerate analysis times as teams in one region can learn from another. This also creates documentation for the new analyses that can become part of the decision-making record.

Regardless of whether the agency chooses to move forward with the rulemaking process, we believe it's essential for NMFS to proactively consider these data issues as the agency and decision makers confront the growing challenges of climate change. We encourage NMFS to continue building on its data modernization and data governance efforts, and to report publicly on the status of its data infrastructure.

Sincerely.

on behalf of the Net Gains Alliance Leadership Team:

George Chmael II George Lapointe Katie Latanich Kate Wing

¹ Net Gains Alliance, <u>Five Recommendations for Better Utilizing VMS Data to Enhance Fisheries Management</u>