NIMBLENESS OF FEDERAL FISHERIES MANAGEMENT DECISION-MAKING PROCESSES TO SUPPORT CLIMATE-READY FISHERIES: A LEGAL ANALYSIS



NOVEMBER 2022

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This research was supported by The Nature Conservancy through grant number OCN_NSGLC_0821 to the University of Mississippi. The statements, findings, conclusions, and recommendations are those of the authors and do not necessarily reflect the views of The Nature Conservancy.

I. Introduction

Climate change is significantly impacting marine fisheries around the globe, as well as the individuals and communities that depend on them. Changes in the distribution and abundance of species affect where and when fishers fish and what they catch. Recently, for example, fishery managers in Alaska canceled the snow crab season in the wake of a significant population decline. While the exact cause of the decline is not known at this time, warmer waters in the Bering Sea are likely a contributing factor. To account for these climatic changes, fishery managers need to integrate nimbleness and adaptability into both short- and long-term decision-making processes to create more responsive management regimes.

Federal fisheries management is complex. Management involves coordination between federal and state agencies, fishery management councils, Tribal Nations, fishers, and members of the public. The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act or MSA) provides fishery managers with opportunities to build flexibility and adaptability into Fishery Management Plans (FMPs), but fishery managers may face some challenges in taking advantage of these opportunities to address climate impacts.

In 2021, the National Sea Grant Law Center received funding from The Nature Conservancy to conduct a comprehensive legal analysis of the nimbleness of federal fisheries management decision-making.² "Nimbleness" refers to the ability of fishery managers to implement management decisions in response to changing conditions in a timely manner. Many factors may impact nimbleness, such as availability of scientific information and tools, procedural requirements, uncertainty in the regulatory process, and litigation risks. The focus of this legal analysis is on the nimbleness of decision-making by fishery managers, not individual fishers or the fishing industry. It is important to keep in mind that a legal framework that enables a federal agency to make and implement a decision within one year may seem "nimble" to the agency, but not to the participants in the fishing industry whose livelihoods are affected by such decisions.

A recent Government Accountability Office (GAO) report revealed that "Most Councils (six of eight) and two stakeholders (two of 15) [said] the existing fisheries management structure is inadequately flexible to respond to climate-related changes in fisheries." The lack of flexibility was attributed to the fact that "fishing quotas for fish stocks are often based on historical data that can be less predictive of future conditions, and fish productivity and distribution is often assumed to be similar to historical conditions when this assumption may no longer hold because of climate change." This is a scientific or cultural constraint on flexibility, rather than legal one.

Kirsten Dobroth, *The Mysterious Case of Alaska's Crabs*, Sci. Friday (Oct. 21, 2022).

The National Sea Grant Law Center would like to thank John Carmichael, Yvonne deReynier, and Carrie Simmons for serving on the project's Advisory Committee. The Advisory Committee provided feedback and guidance to shape the Law Center's project approach and deliverables. The Law Center would also like to thank Robin Craig, Tom Nies, and Sheila Lynch for sharing their expertise and experience through personal interviews.

U.S. GOV'T ACCOUNTABILITY OFF., GAO-22-105132, FEDERAL FISHERIES MANAGEMENT: OPPORTUNITIES EXIST TO ENHANCE CLIMATE RESILIENCE 31 (2022).

⁴ Id.

The MSA does not mandate a rigid decision-making process. While the MSA does impose substantive requirements regarding the contents of FMPs and procedural requirements to ensure adequate public notice and opportunity for comment, fisheries managers can streamline the decision-making processes. Although it can take several years to develop and implement an FMP or significant amendment, fishery managers can integrate nimbleness into FMPs by anticipating and authorizing in-season adjustments. Depending on the type of action, such adjustments can be implemented upon notice or within a couple of months. Climate impacts on a particular fishery, however, can be difficult to anticipate. Unforeseen events can be addressed quickly through emergency action, but it may take several years to enact permanent, long-term management changes.

Section II of this report describes the legal mechanisms and framework governing federal fisheries management including the Magnuson-Stevens Act, Administrative Procedure Act, and National Environmental Policy Act. Section III identifies existing areas of nimbleness within the Magnuson-Stevens Act, including framework measures, notice actions, and emergency actions. Section IV examines barriers fishery managers may face when seeking to implement more nimble processes. Section V presents a case study illustrating the procedures the Pacific Fishery Management Council follows in managing the Sacramento River Winter-run Chinook Salmon fishery and highlights where nimbleness is integrated into the fishery's management. The report concludes in Section VI with summary thoughts about the federal fisheries decision-making process.

II. Federal Fisheries Management Framework

A. Magnuson-Stevens Fishery Conservation and Management Act

Congress passed the Magnuson-Stevens Act⁵ in 1976, and the MSA is the primary federal statute governing U.S. fisheries management. The federal government is generally responsible for managing fishing activities from three to 200 nautical miles off the coast.⁶ In the MSA, Congress recognized that fishery resources "contribute to the food supply, economy, and health of the Nation," and a national program is needed "for the conservation and management of … fishery resources … to facilitate long-term protection." Congress set forth two primary objectives in the MSA: preventing overfishing and rebuilding fish stocks.

Pub. L. No. 94-265, § 2, 90 Stat. 331 (1976). The Act was originally referred to as the Fishery Conservation and Management Act, but in 1996, it was renamed the Magnuson-Stevens Fishery Conservation and Management Act. Pub. L. No. 104-208 tit. II, § 211, 110 Stat. 3009 (1996).

There are some exceptions to this rule. For example, the Texas and Florida coasts are federally managed from nine to 200 nautical miles. Additionally, states may exercise some control over fishing activities in federal waters in limited circumstances, such as regulating state registered fishing vessels or through the Atlantic States Marine Fisheries Commission.

⁷ Pub. L. No. 94-265, § 2 amended by Pub. L. No. 109-479 (2007).

The National Marine Fisheries Service (NMFS or NOAA Fisheries) is the federal agency within the National Oceanic and Atmospheric Administration (NOAA) that manages fisheries in federal waters pursuant to the procedural framework established by the MSA. The MSA's management regime is unique, as Congress established eight Regional Fishery Management Councils⁸ and empowered them to develop Fishery Management Plans (FMPs) and make management recommendations to NMFS. The Councils are advised by science and technical committees called the Scientific & Statistical Committees (SSC).⁹ These committees provide the Councils with ongoing scientific advice for fishery management decisions, help the Councils determine what scientific information is needed to meet the requirements of the MSA, and provide comments on any proposed regulations from the Councils.

FMPs and Council decisions are not self-executing, meaning they do not come into force until NMFS publishes regulations in the Federal Register to implement them. The Federal Register is the official journal of the U.S. Government, and it provides legal notice of administrative rules and notices in a uniform manner. When issuing these regulations, NMFS must comply with the Administrative Procedure Act (APA) and other federal laws, such as the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA). As discussed in more detail below, compliance with these other federal laws may require environmental reviews, interagency consultations, or additional public notice and comment opportunities which can impact the amount of time it takes to implement a Council action.

The foundation of fishery management decision-making is the FMP. FMPs are lengthy, complex documents that set forth the conservation and management measures needed to prevent overfishing, rebuild overfished stocks, and "to protect, restore, and promote the long-term health and stability of the fishery." Such measures may include harvest limits, fishing seasons, and vessel, gear, or area restrictions. Councils are primarily responsible for developing FMPs, monitoring the status of the fishery within the context of the FMP, and making changes to the FMP when needed to meet the objectives and standards established by the FMP.

FMPs must comply with ten National Standards set forth by Congress in the MSA. These standards require consideration of social, economic, biological, and environmental factors associated with fisheries. NMFS has published guidelines on interpreting the National Standards to help inform the Councils of the bases on which FMPs will be reviewed for meeting the National Standards.¹¹ The ten National Standards are listed in Table 1.

⁸ 16 U.S.C. § 1852(a). The eight regional Councils are the New England Council; Mid-Atlantic Council; South Atlantic Council; Caribbean Council; Gulf of Mexico Council; Pacific Council; Western Pacific Council; and North Pacific Council.

⁹ 50 C.F.R. § 600.133.

¹⁰ 16 U.S.C. § 1853(a).

National Standard Guidelines, NOAA FISHERIES, (last visited July 27, 2022); see also 50 C.F.R. § 600.310-55.

Table 1. Magnuson-Stevens Act National Standards¹²

National Standard 1 - Optimum Yield

Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield (OY) from each fishery for the U.S. fishing industry.

National Standard 2 - Scientific Information

Conservation and management measures shall be based upon the best scientific information available.

National Standard 3 - Management Units

To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

National Standard 4 - Allocations

Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various U.S. fishermen, such allocation shall be: (1) Fair and equitable to all such fishermen; (2) Reasonably calculated to promote conservation; and (3) Carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

National Standard 5 - Efficiency

Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.

National Standard 6 - Variations and Contingencies

Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

National Standard 7 - Costs and Benefits

Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

National Standard 8 - Communities

Conservation and management measures shall, consistent with the conservation requirements of the Magnuson-Stevens Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities by utilizing economic and social data that are based upon the best scientific information available in order to: (1) Provide for the sustained participation of such communities; and (2) To the extent practicable, minimize adverse economic impacts on such communities.

National Standard 9 - Bycatch

Conservation and management measures shall, to the extent practicable: (1) Minimize bycatch; and (2) To the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

National Standard 10 - Safety of Life at Sea

Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

¹² 50 C.F.R. §§ 600.305-55.

Beyond the National Standards, the MSA also lists a significant number of other required provisions that FMPs must contain. Councils, for example, must include the conservation and management measures which are necessary to prevent overfishing and rebuild overfished stocks. Councils must assess and specify the maximum sustainable yield and optimum yield of the fishery. FMPs must contain a description of the fishery, including the number of vessels involved, the type and quantity of gear used, amount of catch, and relevant economic information. FMPs must also describe and identify essential fish habitat for the fishery.

Once a Council develops an FMP, it is submitted to NMFS for review. Councils simultaneously submit to NMFS any proposed regulations necessary to implement the FMP or a plan amendment. The MSA sets out the procedure and timeline NMFS must follow in its review of FMPs and amendments. Upon receiving an FMP or amendment from a Council, NMFS must immediately begin a review of the plan and publish a notice in the Federal Register advising the public that the plan is available. Congress has defined "immediately" to mean within 5 days. The notice must provide for a 60-day public comment period. NMFS has 30 days following the end of the public comment period to approve, disapprove, or partially approve the plan. If NMFS does not act within the 30-day period, the plan takes effect as submitted. Due to these procedural requirements, the approval process for an FMP or major amendment takes a minimum of three months. NMFS cannot unilaterally repeal or revoke a previously approved FMP.

A notice of disapproval or partial disapproval must state how the FMP is inconsistent with the MSA or other law.²¹ For example, NMFS recently disapproved Amendment 22 to the Mackerel, Squid, and Butterfish FMP.²² The Mid-Atlantic Fishery Management Council approved Amendment 22, which was intended to revise the number and type of permits in the Illex squid fishery, at its July 2020 meeting. NMFS announced the Council's submission of Amendment 22 to NMFS for review and approval on June 7, 2022 and solicited comments for 60 days.²³ Following its review, NMFS determined that Amendment 22 and its supporting analysis failed to adequately demonstrate that, among other things, it meets the goals and objectives of the FMP and allocates fishing privileges fairly and equitably.²⁴ Councils may revise actions following a disapproval to address NMFS concerns and resubmit for review and approval.

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<sup>13</sup> 16 U.S.C. § 1853(a).
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¹⁴ 16 U.S.C. § 1853(c).

¹⁵ 16 U.S.C. § 1854(a)(1)(B).

¹⁶ 16 U.S.C. § 1854(a)(5).

¹⁷ 16 U.S.C. § 1854(a)(1)(B).

¹⁸ 16 U.S.C. § 1854(a)(1).

¹⁹ 16 U.S.C. § 1854(a)(3).

²⁰ 16 U.S.C. § 1855(c); 16 U.S.C. § 1854(h).

²¹ 16 U.S.C. § 1854(a)(3).

²² Amendment 22 to the Mackerel, Squid, and Butterfish Fishery Management Plan Decision, NOAA FISHERIES (Sept. 6, 2022).

Amendment 22 to the Mackerel, Squid, and Butterfish Fishery Management Plan, 87 Fed. Reg. 34629-01 (proposed June 2, 2022) (to be codified at 50 C.F.R. pt. 648).

Amendment 22 to the Mackerel, Squid, and Butterfish Fishery Management Plan Decision, supra note 22.

To give legal effect to a Council action following agency approval, the Secretary of Commerce promulgates regulations to implement the FMP, amendment, or recommendation.²⁵ NMFS reviews proposed regulations submitted by Councils to determine whether they are consistent with the FMP, amendment, MSA, and other applicable law. If NMFS determines that the proposed regulations are consistent, they must publish the proposed regulations in the Federal Register for a public comment period of 15 to 60 days.²⁶ Final regulations should be published in the Federal Register within 30 days after the end of the public comment period.²⁷

B. Administrative Procedure Act

In addition to following the procedures outlined in the MSA, NMFS must also comply with the procedures of the APA when taking action to implement fishery management decisions. The APA provides general procedures for agency rulemaking and adjudications. Additional requirements may be imposed by other statutes, such as the MSA. Most of the actions NMFS takes under the MSA are classified as rulemaking. Rulemaking is defined as the "agency process for formulating, amending, or repealing a rule," and can be either formal or informal. Informal rulemaking, also known as notice-and-comment rulemaking, is the most common process used by agencies.

When promulgating rules, the APA requires the agency to publish notice of a proposed rule in the Federal Register at least 30 days before the rule takes effect.³² Agencies must then provide "interested persons an opportunity to participate in the rulemaking" through the submission of written comments on the proposed rule.³³ Note that the APA does not set a minimum time for the public comment period. However, as discussed above, the MSA requires a 60-day public comment period for FMPs and amendments and allows a range of 15-60 days for proposed regulations.

Notice and comment procedures are not required under the APA if an agency "for good cause finds ... that notice and public procedure thereon are impracticable, unnecessary, or contrary to the public interest." Emergency actions are a classic example of when an agency might invoke the good cause exception in order to more quickly address a public health or environmental threat. As discussed in more detail in Section III, NFMS often invokes the "good cause" exception when taking actions authorized under existing FMPs and their implementing regulations.

²⁵ 16 U.S.C. § 1854(c); 16 U.S.C. § 1854(b).

²⁶ 16 U.S.C. § 1854((b)(1)(A).

²⁷ 16 U.S.C. § 1854(b)(3).

²⁸ 5 U.S.C. § 551(5)-(7).

²⁹ 5 U.S.C. § 559.

⁵ U.S.C. § 551(5). Rulemaking procedural requirements do not apply "to interpretive rules, general statement of policy, or rules of agency organization, procedure, or practice." 5 U.S.C. § 553(b)(A).

TODD GARVEY, CONG. RSCH. SERV., R41546, A BRIEF OVERVIEW OF RULEMAKING AND JUDICIAL REVIEW 1, 2 (2017). The Supreme Court has found that formal rulemaking, which requires an agency hearing, is only required when Congress has specified that the rulemaking must be "on the record." *Id.* at 3.

³² 5 U.S.C. § 553(d).

³³ 5 U.S.C. § 553(c).

³⁴ 5 U.S.C. § 553(b)(3)(B).

Agencies must consider all "relevant matters presented" from the public comments and formally respond to the public comments.³⁵ The statute does not define what it means to "consider" the public comments, and there has been much litigation over the extent of comment consideration and the response required from an agency. For instance, the Supreme Court has ruled that the agency needs to respond to "significant comments," which other courts have interpreted as comments "which raise relevant points and which, if adopted, would require a change in the agency's proposed rule." The APA suggests the agency responds to the public comments by issuing a "concise general statement of their basis and purpose." In practice, the agency's general statement is a detailed, lengthy preamble to the final rule which is published in the Federal Register. In the preamble, the agency provides detail on the public comments received and their response. The length of time between publication of a proposed rule and final rule can vary considerably depending on the volume and substance of comments received.

If the agency makes substantial modifications to a proposed rule based on public comments or for other reasons, it may need to start the process over with a new proposed rule and public comment period before issuing a final rule.³⁹ Pursuant to MSA requirements, NMFS must consult with the Councils before making any revisions to the proposed regulations, and must publish in the Federal Register any differences between the proposed and final regulations.⁴⁰ Generally speaking, the required procedures for agency rulemaking are as follows:

- Preparation of a proposed rulemaking
- Publication in the Federal Register of the Proposed Rule
- Public comment period (15 60 days under the MSA)
- Consideration of public comments
- Preparation of a Final Rule
- Publication of Final Rule in the Federal Register

C. National Environmental Policy Act

NEPA is a procedural statute established to declare a national policy of preventing damage to the environment.⁴¹ NEPA requires that "all major federal actions significantly affecting the quality of the human environment" include a detailed statement.⁴² This "detailed statement," referred to as an Environmental Impact Statement (EIS), is a report used to consider, analyze, and weigh the environmental effects of a proposed project. Additionally, the NEPA process is intended to encourage public involvement.⁴³

³⁵ 5 U.S.C. § 553(c)

TODD GARVEY, CONG. RSCH. SERV., R41546, A BRIEF OVERVIEW OF RULEMAKING AND JUDICIAL REVIEW 3 (2017) (citing Perez v. Mortg. Bankers Ass'n, 575 U.S. 92, 96 (2015) ("An agency must consider and respond to significant comments received during the period for public comment.")).

³⁷ *Id.* (citing Am. Mining Cong. v. EPA, 965 F.2d 759, 771 (9th Cir. 1992)).

³⁸ 5 U.S.C. § 553(c).

The statute does not define when a rule is modified to the extent that the process must start over. In *Chocolate Manufacturers Ass'n v. Block*, 775 F.2d 1089 (4th Cir. 1985), the court found that if the final rule can be characterized as a "logical outgrowth" of the rule as proposed, then notice is adequate.

⁴⁰ 16 U.S.C. § 1854(b)(3).

⁴¹ 42 U.S.C. § 4321.

⁴² 42 U.S.C. § 4332(C).

⁴³ 40 C.F.R. § 1500.2(d).

FMPs and their amendments are major federal actions that must comply with NEPA procedures.⁴⁴ If an agency is unsure whether an EIS is required, the agency may first prepare an Environmental Assessment (EA) to determine whether there will be significant impacts. If the EA determines the federal action will significantly affect the quality of the human environment, then the agency must prepare an EIS. If the EA indicates the federal action will not significantly affect the quality of the human environment, then the agency publishes the EA along with a Finding of No Significant Impact (FONSI) identifying the reasons why the action will not have a significant impact on the environment.

In some circumstances, neither an EA nor an EIS is prepared. NEPA regulations published by the Council on Environmental Quality permit agencies to pre-identify classes of actions that are determined to not have a significant effect on the human environment.⁴⁵ These are referred to as Categorical Exclusions (CE). "A CE is a form of NEPA compliance, without the detailed analysis that occurs in an EA or EIS."⁴⁶ A CE may only be applied to a proposed action when it (1) falls within a category of actions covered by a CE, (2) is not part of a larger action and can be reviewed independently; and (3) there are no extraordinary circumstances that may require further analysis in an EA or EIS.⁴⁷

NOAA has identified several CEs that relate to fisheries actions. For example, there is a CE for "[a]n action that is a technical correction or a change to a fishery management action or regulation, which does not result in a substantial change in any of the following: fishing location, timing, effort, authorized gear types, or harvest levels." Such actions may include changes to reporting requirements, extension of the period of effectiveness of a regulation, or changes to gear marking requirements. There is also a CE for "[t]emporary fishery closures or extensions of closures under Section 305(c)(3)(C) of the Magnuson-Stevens Fishery Conservation and Management Act to ensure public health and safety." 50

A CE may not be applied to an action if there are "extraordinary circumstances" present. Extraordinary circumstances might include adverse effects on an area with unique environmental characteristics, such as a marine sanctuary; adverse effects on species or habitats protected by the Endangered Species Act or Marine Mammal Protection Act; or environmental effects that are highly controversial or uncertain.⁵¹ Depending on the type of action, the Council or NMFS may need to prepare a document evaluating the applicability of the CE.⁵²

In Oceana, Inc. v. Pritzker, 24 F. Supp. 3d 49, 56 (D.D.C. 2014), the court held that "FMPs and their amendments are considered major federal actions sufficient to trigger NEPA."

⁴² U.S.C. § 1247; 40 C.F.R. § 1508.4.

⁴⁶ U.S. Dep't Com., Nat'l Oceanic & Atmospheric Admin., Policy and Procedures for Compliance with the National Environmental Policy Act and Related Authorities 4 (2017) [hereinafter NOAA Companion Manual].

⁴⁷ Id.

⁴⁸ COUNSEL ENV'T QUALITY, Categorical Exclusions, NEPA.GOV (June 18, 2020), (access list by selecting "List of Federal Agency Categorical Exclusions").

NOAA COMPANION MANUAL, *supra* note 46, at E-1.

Counsel Env't Quality, *supra* note 48.

NOAA COMPANION MANUAL, *supra* note 46, at 5.

⁵² I.d

III. Existing Nimbleness within the Federal Framework

Once an FMP is in place, the Council and NMFS must continue to monitor the fishery and adjust to make sure the stock does not become overfished. "The ease of continuing management for a fishery depends largely on the foresight exercised in preparing the FMP and on the identification of continuing research and data needs required to monitor changing fishery conditions." In 2006, Congress amended the MSA to require, among other things, that Councils include within FMPs a "mechanism for specifying annual catch limits in the plan (including a multi year plan), implementing regulations, or annual specifications, at a level such that overfishing does not occur in the fishery, including measures to ensure accountability." Annual catch limits (ACL) and associated accountability measures are adopted as either an amendment to an FMP or as part of a framework process, discussed in more detail below.

An FMP can be amended following the same process by which it was adopted. Changes to the conservation and management measures set forth in the FMP can be made in a number of ways depending on the scope of the change, how urgent the need for action is, and whether the management change had been anticipated and included in the FMP. Councils can build into FMPs mechanisms which anticipate that some changes in how fisheries are managed will be needed. Such mechanisms include accountability measures that can be implemented by NMFS upon notice without a full rulemaking process. Additionally, NMFS may take emergency action independently or at the request of a Council to modify an FMP when an unanticipated event occurs. Depending on the type of action, different procedural steps are required for implementing the desired changes.

A. Amendments

Major changes to an FMP require an amendment. Amendments are the least nimble change to an FMP because amendments track the same basic process to develop, review, approve, and implement the amendment as was used for the FMP itself.⁵⁶ (See Figure 1). Councils have given varying time frames for how long amendments can take:⁵⁷

- New England Fishery Management Council: 3-4 years⁵⁸
- Pacific Fishery Management Council: 1-3 years (at least 3 meetings)⁵⁹
- North Pacific Fishery Management Council: at least 2 years (at least 3 meetings, but usually 4)60
- Mid-Atlantic Fishery Management Council: at least 2.5 years⁶¹
- Caribbean Fishery Management Council: average of 2.5 years (3-5 meetings)⁶²

⁵³ U.S. Env't Prot. Agency, Off. Fed. Activities, Reviewing Environmental Impact Statements for Fishery Management Plans (2005).

⁵⁴ 16 U.S.C. 1853(15).

Kristina Alexander, Guide to Fishery Management, Part 3: Creation of a Fishery Management Plan, MISSISSIPPI-ALABAMA SEA GRANT LEGAL PROGRAM (2021).

See Reviewing Environmental Impact Statements for Fishery Management Plans, supra note 53, at 14.

⁵⁷ See Fact Sheets, U.S. REG'L FISHERY MGMT. COUNCILS (last visited Nov. 3, 2022).

New England Fishery Mgmt. Council, Timeline for Amendments (2020).

⁵⁹ PACIFIC FISHERY MGMT. COUNCIL, FACT SHEET: AMENDMENT TIMELINE (2021).

NORTH PACIFIC FISHERY MGMT. COUNCIL, TIMELINE FOR AMENDMENTS (2021).

⁶¹ MID-ATLANTIC FISHERY MGMT. COUNCIL, FMP AND AMENDMENT DEVELOPMENT TIMELINE (last visited Nov. 9, 2022).

⁶² CARIBBEAN FISHERY MGMT. COUNCIL, FISHERY MANAGEMENT PLANS TIMELINE FOR AMENDMENTS (2021).

The varying length of time to complete the amendment process depends on a variety of factors. For instance, the North Pacific Fishery Management Council states that "a straightforward, uncomplicated, and uncontroversial management action" can make it through the Council process in 4-6 months, though NMFS still needs to finalize the amendment afterwards.⁶³ The complexity of the amendment and the amount of public interest can also affect the time needed to complete the process, as well as whether input from the Council's advisory committees is required.⁶⁴ Other factors can include "[c]ouncil priorities, staff workload, complexity of the action, availability of staff at the NMFS regional office and science center, and other factors."

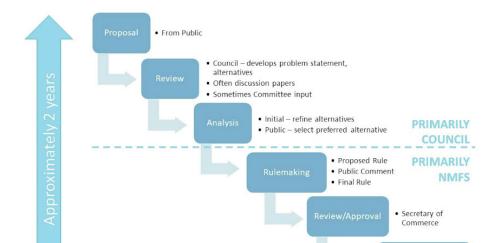


Figure 1. Example of Amendment Process from the North Pacific Fishery Management Council⁶⁶

An example of a simple, uncomplicated amendment was recently completed by the New England Fishery Management Council to its Northeast Skate Complex FMP. Beginning in 2021, the Council began recognizing that some of the FMP's objectives, which had not been changed since the FMP was adopted in 2003, were outdated and needed revisions. Initially, the Council considered making these changes through a Framework Adjustment (a process discussed in more detail below). On January 19, 2022, the Council decided not to put forth a new framework adjustment and instead proposed drafting an amendment. Ultimately, the Council voted on February 1, 2022 to include the revisions as Amendment 8 to the FMP. Because the objectives found within the FMP are not part of codified regulation, the Council and NMFS determined that the revisions were administrative in nature. This determination allowed the Council and NMFS to apply a Categorical Exclusion (CE) to the action under NEPA and determine that an ESA review was not necessary. In addition, NMFS only received one public comment when it published its Notice of Amendment in the Federal Register.

Timeline for Amendments *supra* note 60.

⁶⁴ FISHERY MANAGEMENT PLANS TIMELINE FOR AMENDMENTS *supra* note 62.

⁶⁵ FMP AND AMENDMENT DEVELOPMENT TIMELINE, *supra* note 61.

Timeline for Amendments, *supra* note 60.

Withdrawal of the Notice of Intent to Prepare an Environmental Impact Statement for Amendment 5, 86 Fed. Reg. 64186 (Nov. 12, 2021).

⁶⁸ NEW ENGLAND FISHERY MGMT. COUNCIL, MEETING SUMMARY: SKATE ADVISORY PANEL AND COMMITTEE (Jan. 19, 2022).

⁶⁹ NEW ENGLAND FISHERY MGMT. COUNCIL, NORTHEAST SKATE COMPLEX FISHERY MANAGEMENT PLAN AMENDMENT 8 (2022).

Amendment 8 to the Northeast Skate Complex Fishery Management Plan, 87 Fed. Reg. 39002 (June 30, 2022) (to be codified at 50 C.F.R. pt. 648).

NORTHEAST SKATE COMPLEX FISHERY MANAGEMENT PLAN AMENDMENT 8, supra note 69.

⁷² Id.

As a result, Amendment 8 was finalized on a quick timeline (approx. 6 months):⁷³

- January 19, 2022: Initial Amendment public meeting with ability to comment
- February 1, 2022: Final Amendment public meeting with ability to comment
- March 3, 2022: Preliminary submission of Amendment to NMFS
- March 28, 2022: Final submission of Amendment to NMFS
- April 1, 2022: NMFS publishes proposed action in Federal Register⁷⁴
- June 30, 2022: NMFS publishes notice of final agency decision in Federal Register.⁷⁵

The New England Fishery Management Council, however, also has examples on the other end of the spectrum. According to the Council, "[w]hile many framework actions are initiated and implemented within one year, most amendments take at least three-four years for the Council to complete its work, and agency review and implementation can take over one year after final Council approval." For instance, scoping for Amendment 8 to the Council's Atlantic Herring FMP began in February 26, 2015. The Council approved the Draft EIS required under NEPA on December 5, 2017, and the Final EIS on September 25, 2018. Amendment 8 was adopted by the Council on September 25, 2018 and submitted to NMFS for review in 2019. NMFS published the notice of availability on August 21, 2019, followed by the proposed rules on October 9, 2019. NMFS approved Amendment 8 on November 19, 2019 and published the final rule on January 11, 2021. The entire amendment process for Amendment 8 was around 6 years.

B. Framework Measures

Councils can engage in a form of adaptive management through a process known as "frameworking." Some FMPs or amendments are designed to enable more rapid implementation of decisions. NFMS defines "frameworking" as "establishing in an FMP/amendment or regulations a mechanism for implementing recurrent, routine, or foreseeable actions in an expedited manner." A "framework measure is intended to describe future framework management actions that would be implemented within a range of actions as defined and analyzed to the extent possible at the time the framework measure is incorporated into the FMP." Examples of framework measures include establishing procedures for setting annual specifications or taking in-season management actions, such as quota adjustments or in-season closures. Use of frameworking is widespread among the Councils. 44

⁷³ Id

Amendment 8 to the Northeast Skate Complex Fishery Management Plan, 87 Fed. Reg. 19063 (proposed Mar. 29, 2022) (to be codified at 50 C.F.R. pt. 648).

Amendment 8 to the Northeast Skate Complex Fishery Management Plan, 87 Fed. Reg. 39002 (June 30, 2022) (to be codified at 50 C.F.R. pt. 648).

Timeline for Amendments, *supra* note 58.

⁷⁷ Amendment 8, 84 Fed. Reg. 54094 (Oct. 9, 2019).

⁷⁸ NEW ENGLAND FISHERY MANAGEMENT COUNCIL, ATLANTIC HERRING FISHERY MANAGEMENT PLAN AMENDMENT 8, FINAL SUBMISSION (May 2019).

⁷⁹ Amendment 8, 84 Fed Reg. 43573 (Aug. 21, 2019) (to be codified at 50 C.F.R. pt. 648).

Amendment 8, *supra* note 77.

⁸¹ Amendment 8, 86 Fed. Reg. 1810 (January 11, 2021) (to be codified at 50 C.F.R. pt. 648).

NAT'L MARINE FISHERIES SERV., 01-101-03, OPERATIONAL GUIDELINE FOR THE MAGUNSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT FISHERY MANAGEMENT PROCESS 3, app. 1 (2017).

⁸³ Id.

Marian Macpherson, In Pursuit of "Optimum": Forty Years of Federal Fisheries Management Under the Magnuson-Stevens Fishery Conservation and Management Act, 31 TULANE ENVIRONMENTAL L. J. 209, 265 (2018).

Once the framework is in place through the adoption and implementation of an FMP or amendment, framework measures can be adjusted through the framework process without the need to further amend the FMP. For example, the implementing regulations for the Summer Flounder, Scup, and Black Sea Bass FMP authorize the Mid-Atlantic Fishery Management Council to initiate action to adjust management measures to meet the goals and objectives of the FMP. Adjustments are limited to specific categories of actions, including adjustments within existing harvest control levels, minimum fish sizes, gear requirements, closed areas, or seasons. However, "[i]ssues that require significant departures from previously contemplated measures or that are otherwise introducing new concepts may require an amendment of the FMP instead of a framework adjustment."

Framework adjustments are often implemented more expeditiously than FMP amendments.⁸⁷ A review of recent NMFS rulemakings approving and implementing framework adjustments of the New England Fishery Management Council indicates that the process can take less than a year, or about half the time required for a full amendment. One of the reasons for the faster timeline is a shorter public comment period. Because adjustments are not considered amendments to an FMP, a 60-day public comment period is not required. The notice of the proposed rules often provides for just a 15-day public comment period.

In June 2017, the New England Fishery Management Council initiated Framework Adjustment 57 to the Northeast Multispecies Fishery FMP. This FMP outlines the management for thirteen groundfish species off the New England and Mid-Atlantic coasts. The adjustment sought to add an exemption to the limit on the number of gillnets that a day gillnet vessel can use in the Gulf of Maine. The adjustment also provided allocations for the 2018 fishing year. An EA was completed in January 2018, and the agency issued a FONSI in March 2018. The Framework Adjustment proposed rule was published in the Federal Register on March 22, 2018, and public comment was open for 15 days. NOAA Fisheries published the final rule on May 1, 2018, approximately 11 months after the Council initiated action.

More recently, the New England Fishery Management Council implemented Framework Adjustment 34 to the Atlantic Sea Scallop FMP in about nine months. The Council's initial framework meeting was June 22, 2021.⁹³ Framework Adjustment 34 was approved by the Council on December 9, 2021.⁹⁴ The process moved swiftly after that. NMFS published a proposed rule on February 15, 2022 with a 15-day public comment period. The Framework Adjustment and the EA were submitted to NMFS for approval on March 10, 2022. The final rule was published by NMFS on March 30, 2022.

⁸⁵ 50 C.F.R. § 648.110(a).

⁸⁶ *Id.* at § 648.110(a)(1).

Oceana v. Pritzker, 26 F.Supp. 3d 33, 37-38 (D.D.C. 2014) (citing "amendments, which alter Plans in broad strokes," or "Framework Adjustments, which are expedited changes that modify Plans in more modest ways").

New England Fishery Mgmt. Council, Meeting Summary: Groundfish Committee (June 15, 2017).

The thirteen species include cod, haddock, yellowtail flounder, pollock, plaice, witch flounder, white hake, windowpane flounder, Atlantic halibut, winter flounder, redfish, Atlantic wolffish, and ocean pout.

NEW ENGLAND FISHERY MGMT. COUNCIL, FRAMEWORK ADJUSTMENT 57 TO THE NORTHEAST MULTISPECIES FMP (March 2, 2018).

⁹¹ Framework Adjustment 57, 83 Fed. Reg. 12531 (proposed Mar. 22, 2018) (to be codified at 50 C.F.R. pt. 648).

⁹² 2018 Allocation of Northeast Multispecies Annual Catch Entitlements and Approval of a Regulatory Exemption for Sectors, 84 Fed. Reg. 18965 (May 1, 2018) (to be codified at 50 C.F.R. pt. 648).

⁹³ NEW ENGLAND FISHERY MGMT. COUNCIL, SCALLOP FISHERY MANAGEMENT PLAN FRAMEWORK ADJUSTMENT 34 (Mar. 10, 2022).

Framework Adjustment 34 to the Atlantic Sea Scallop Fishery Management Plan, 87 Fed. Reg. 18277 (Mar. 30, 2022) (to be codified at 50 C.F.R. pt. 648). See also, Nat'l Marine Fisheries Serv., Finding of No Significant Impact under the National Environmental Policy Act (Mar. 14, 2022),

C. Notice Actions

As discussed above, FMPs must include accountability measures. "Accountability measures are management controls that prevent catch limits from being exceeded, or correct for overages if they occur." Accountability measures may include in-season actions such as size limits, gear restrictions, and seasonal closures. Accountability measures may also include postseason actions that are designed to correct for any overage that occurred. Fishery data is reviewed following each fishing season to determine what, if any, adjustments might be needed.

NFMS can use "notice actions" to implement accountability measures identified in an FMP. A notice action refers to an action taken by NMFS to give effect to a built-in response within an FMP. If an ACL is exceeded, the accountability measure is triggered and NMFS provides notice in the Federal Register. A notice action, for instance, might be used to close a fishery if harvest levels are reached too early in the season. Notice actions are published in the Federal Register, but rulemaking procedures are not required. Because the accountability measures were included in an FMP that was adopted through a full rulemaking process, the "activation of the measure is not considered an amendment to the plan."

For example, the regulations implementing the Snapper-Grouper Fishery of the South Atlantic Region FMP prepared by the South Atlantic Fishery Management Council require that NMFS close the commercial red snapper fishery when the commercial ACL is reached. On August 30, 2022, NMFS published a notice in the Federal Register that it was closing the commercial sector for red snapper in federal waters of the South Atlantic because the commercial ACL for the 2022 fishing year was reached. When accountability measures are triggered, NFMS does not engage in the full rulemaking process. It skips the proposed rule and public comment step, invoking the APA's good cause exemption to waive prior notice and an opportunity for public comment. NMFS justifies the exemption by arguing that the rules that established the ACL and the accountability measures were subject to public comment, and the subsequent action is just providing notice of the triggering of the accountability measure.

Councils can also anticipate the need for in-season flexibility and grant NFMS authority to make adjustments through notice actions in implementing regulations for FMPs. The Atlantic Deep-Sea Red Crab Fishery Management Plan, for example, includes an annual specification process that requires the New England Fishery Management Council to recommend an acceptable biological catch, an annual catch limit, and total allowable landings every four years.¹⁰¹ The implementing regulations authorize NFMS to close the fishery when the total allowable landings have been harvested, and to adjust the quotas in subsequent years to account for any overages.¹⁰²

⁹⁵ Northeast Multispecies Annual Catch Limits and Accountability Measures, NOAA FISHERIES, (last visited Nov. 3, 2022).

⁹⁶ Alexander, *supra* note 55.

⁹⁷ Id

⁹⁸ 50 C.F.R. § 622.193(y)(1).

⁹⁹ Commercial Closure for South Atlantic Red Snapper, 87 Fed. Reg. 52859 (Aug. 30, 2022) (to be codified at 50 C.F.R. pt. 622).

¹⁰⁰ 5 U.S.C. § 553(b)(B).

²⁰²⁰ Atlantic Deep-Sea Red Crab Specifications, 85 Fed. Reg. 20615 (Apr. 2, 2020) (to be codified at 50 C.F.R. pt. 648).

¹⁰² 50 C.F.R. § 648.262 (2022).

Consider this recent example. The Mid-Atlantic Fishery Management Council manages the Illex squid fishery under the Mackerel, Squid, and Butterfish (MSB) FMP. Management was independently established for each species in 1978, and the three fisheries were merged into one FMP in 1983. In Amendment 9 of the MSB FMP, adopted in 2008, the Council allowed for multi-year specifications for all four managed species (mackerel, butterfish, Illex, and Loligo). The FMP's implementing regulations provide that specifications "may be adjusted by [NMFS], in consultation with the MAFMC, during the fishing year by publishing notification in the Federal Register. On July 22, 2021, NMFS published the final 2021 and projected 2022 specifications for the Illex squid fishery which set the acceptable biological catch (ABC) at 33,000 mt. The 2022 specifications were finalized by NMFS on May 10, 2022 and the ABC for the Illex squid fishery remained at 33,000 mt.

While NMFS was finalizing the 2022 specifications, the Council was considering a specification adjustment. In March 2022, the Council's Scientific & Statistical Committee recommended increasing the 2022 ABC from 33,000 mt to 40,000 mt. This was the result of their conclusion "that the species continues to be lightly exploited and the fishery footprint is small relative to the entire management unit." The Council's environmental analysis for the 2022 specifications considered a range of ABCs from 18,000-40,000 mt. The Council proceeded to recommend this specification adjustment at its April 2022 meeting and requested that NMFS use its in-season authority to increase the 2022 ABC. On August 9, 2022, NMFS published a final rule increasing the specifications for the 2022 Illex squid fishery. NMFS invoked the good cause exemption to waive the public comment opportunity on this action. The agency argued that notice and comment was unnecessary because "[t]his action increases the 2022 specifications (i.e., annual catch limits) for the Illex squid fishery based on new information, which is authorized pursuant to our regulatory in-season authority at 50 CFR 648.22(e)." The timeline for this action was approximately 6 months (March - August).

D. Emergency Actions

Congress anticipated that NFMS or the Councils may need to take emergency action to address an unanticipated issue. Emergency action is authorized by the MSA if NMFS or a Council determines that "an emergency exists or that interim measures are needed to reduce overfishing for any fishery." NOAA policy limits the use of this emergency provision to "extremely urgent, special circumstances where substantial harm to or disruption of the resource, fishery, or community would be caused in the time it would take to follow standard rulemaking procedures." 113

¹⁰³ MID-ATLANTIC FISHERY MGMT. COUNCIL, AMENDMENT 9 TO THE ATLANTIC MACKEREL, SQUID, AND BUTTERFISH FISHERY MANAGEMENT PLAN (2008).

¹⁰⁴ 50 C.F.R. § 648.22(e).

Atlantic Mackerel, Squid, and Butterfish Fisheries; Specifications, 86 Fed. Reg. 38586 (July 22, 2021) (to be codified at 50 C.F.R. pt. 648).

Atlantic Mackerel, Squid, and Butterfish Fisheries; Final 2022 Specifications, 87 Fed. Reg. 27952 (May 10, 2022) (to be codified at 50 C.F.R. pt. 648).

MID-ATLANTIC FISHERY MGMT. COUNCIL, MEMORANDUM RE REPORT OF THE MARCH 2022 SSC MEETING (Mar. 28, 2022).

¹⁰⁸ Illex Squid Fishery; Revised 2022 Specifications, 87 Fed. Reg. 48447 (Aug. 9, 2022) (to be codified at 50 C.F.R. 648).

MID-ATLANTIC FISHERY MGMT. COUNCIL, WEBINAR MEETING: MOTIONS (Apr. 6, 2022).

¹¹⁰ Illex Squid Fishery; supra note 108.

¹¹¹ *Id.* at 48448.

¹¹² 16 U.S.C. § 1855(c).

NAT'L MARINE FISHERIES SERV., 01-101-07, POLICY GUIDELINES FOR THE USE OF EMERGENCY RULES (2018).

NMFS must promulgate emergency regulations to address an emergency if requested to do so by a Council upon unanimous vote.¹¹⁴ NMFS has discretion about whether to act upon an emergency action request by a Council with a less than unanimous vote.¹¹⁵ Emergency regulations must be published in the Federal Register and identify the reason for the emergency action.¹¹⁶

An emergency action that changes an existing FMP or amendment is treated as an amendment to such plan for the period in which such emergency regulation is in effect.¹¹⁷ With limited exceptions, emergency regulations may only be in place for 180 days.¹¹⁸ Emergency regulations may be extended by publication in the Federal Register for one additional period of not more than 186 days, provided the public has had an opportunity to comment and, in the case of a Council recommendation, the Council is actively preparing an FMP, amendment, or proposed regulation to address the emergency on a permanent basis.¹¹⁹

Emergency actions were frequently needed during the COVID-19 pandemic to deal with shifting market demand and provide operational flexibility in light of pandemic restrictions. Below is a sampling of the COVID-19-related emergency actions taken by Councils and NMFS.

- In March 2020, NMFS issued an emergency rule to waive observer coverage and some program requirements in response to COVID-19.¹²⁰ The agency stated the reason for the emergency action was to protect public health and the safety of fishermen. While the action became effective immediately upon issuance in the Federal Register, the agency did solicit public comments for 30 days.¹²¹
- In June 2020, NMFS issued an emergency rule to temporarily allow vessels in the Pacific whiting fishery to operate as both a mothership (MS) and catcher/processor (C/P) during the same calendar year. ¹²² In March 2020, a company holding a MS permit announced that it would not commit a processing platform to the MS sector which jeopardized the ability of three catcher vessels to harvest their 2020 Pacific whiting allocations. The Pacific Fishery Management Council requested NMFS initiate emergency action in April 2020 to allow vessels to operate as both types of processing platforms. Due to the continuing impacts of the COVID-19 pandemic, a second temporary rule was issued on May 14, 2021 to permit vessels to switch during the 2021 Pacific whiting season. ¹²³

¹¹⁴ 16 U.S.C. § 1855(c)(2)(A).

¹¹⁵ 16 U.S.C. § 1855(c)(2)(B).

¹¹⁶ 16 U.S.C. § 1855(c)(3)(A).

¹¹⁷ 16 U.S.C. § 1855(c)(3).

^{118 16} U.S.C. § 1855(c). Emergency regulations that respond to a public health emergency or oil spill may stay in effect until the conditions creating the emergency no longer exist.

¹¹⁹ 16 U.S.C. § 1855(c)(3)(B).

Emergency Measures To Address Fishery Observer Coverage During the COVID-19 Coronavirus Pandemic, 85 Fed. Reg. 17285 (Mar. 27, 2020) (to be codified at 50 C.F.R. 600).

¹²¹ Id

Emergency Action To Temporarily Remove Seasonal Processing Limitations for Pacific Whiting Motherships and Catcher-Processors, 85 Fed. Reg. 37027 (June 19, 2020) (to be codified at 50 C.F.R. 660).

Emergency Action to Temporarily Remove 2021 Seasonal Processing Limitations for Pacific Whiting Motherships and Catcher-Processors, 86 Fed. Reg. 26,439 (May 14, 2021) (to be codified at 50 C.F.R. 660).

- In May 2020, the North Pacific Fishery Management Council requested NMFS to issue an Emergency Rule to modify the temporary transfer provision of the Individual Fishing Quota (IFQ) Program for the fixed-gear commercial Pacific halibut and sablefish fisheries for the 2020 IFQ fishing year because the health mandates and travel restrictions made it difficult to travel to certain ports and would limit their ability to harvest in the 2020 season. ¹²⁴ The Council's action was in response to an industry request submitted to the Council in April 2020. ¹²⁵ NMFS issued the emergency rule on June 25, 2020, effective immediately. ¹²⁶
- The Mid-Atlantic Fishery Management Council requested an emergency action to allow carryover of Golden Tilefish IFQ quotas after Covid-19 caused unforeseen market changes. The emergency action, which would have allowed quota holders to carryover a portion of their 2020 quota to the 2021 fishing year, was first discussed by the Council on March 26, 2020. The Council approved the recommendation for emergency action on April 8, 2020. The Council submitted the initial recommendation to NFMS on May 11, 2020 and the final submission was on July 21, 2020. A supplemental information report was prepared by the Council to determine if the emergency action would require a supplement to the EA prepared for the 2018-2020 specifications. The report, which was released in October 2020, found that a supplemental EA was not required. NMFS published the proposed rule in the Federal Register on November 13, 2020. and the final rule on December 21, 2020.

A recent non-COVID emergency action was taken by the Gulf of Mexico Fishery Management Council. Gulf reef fish, including red grouper, are managed by the Council under the Fishery Management Plan for Reef Fish Resources of the Gulf (Reef Fish FMP). The Council recommended emergency action in 2018 due to concerns that red grouper was scarcer in abundance than in previous years. In October 2018, the Council requested that NMFS issue an emergency rule to establish an annual catch limit based on the 2017 landings data until the Council could develop a framework amendment to reduce the catch limits.¹³³ NMFS completed the draft EA for the Emergency Rule in February 2019. ¹³⁴ NMFS published the proposed rule on March 5, 2019¹³⁵ and the final rule on May 17, 2019. ¹³⁶

NORTH PACIFIC FISHERY MGMT. COUNCIL, MEETING SUMMARY 3 (May 15, 2020).

NORTH PACIFIC FISHERY MGMT, COUNCIL, B1 MODIFY HALIBUT & SABLEFISH IFO TRANSFER PROVISIONS (2020).

Modify Temporary Transfer Provisions, 85 Fed. Reg. 38100 (June 22, 2020) (to be codified at 50 C.F.R. pt. 679).

Golden Tilefish Fishery; 2021 and Projected 2022 Specifications and Emergency Action, 85 Fed. Reg. 72616 (proposed Nov. 13, 2020) (to be codified at 50 C.F.R. pt. 648).

¹²⁸ MID-ATLANTIC FISHERIES MGMT. COUNCIL, MEMORANDUM RE GOLDEN TILEFISH SPECIFICATIONS FOR 2021 AND 2022 (Mar. 26, 2020).

MID-ATLANTIC FISHERIES MGMT. COUNCIL, APRIL 2020 COUNCIL MEETING WEBINAR (Apr. 7, 2020).

MID-ATLANTIC FISHERIES MGMT. COUNCIL, GOLDEN TILEFISH 2021 AND 2022 SPECIFICATIONS SUPPLEMENTAL INFORMATION REPORT AND REGULATORY FLEXIBILITY ACT ANALYSIS (2020).

Golden Tilefish Fishery; 2021 and Projected 2022 Specifications and Emergency Action, 85 Fed. Reg. 72616 (proposed Nov. 13, 2020) (to be codified at 50 C.F.R. pt. 648).

¹³² Golden Tilefish Fishery; Final 2021 and Projected 2022 Specifications and Emergency Action, 85 Fed. Reg. 82944 (Dec. 14, 2020) (to be codified at 50 C.F.R. pt. 648).

Press Release, Gulf of Mexico Fishery Mgmt. Council (Oct. 20, 2018); Gulf of Mexico Fishery Mgmt. Council, Full Council Session: 271st Meeting 170, 174 (Oct. 24, 2018).

Nat'l Marine Fisheries Serv., Draft Environmental Assessment for an Emergency Rule to the Fishery Management Plan for Reef Fish Resources of the Gulf of Mexico (Feb. 2019).

Temporary Rule to Establish Management Measures for Red Grouper in the Gulf of Mexico, 84 Fed. Reg. 7864 (proposed Feb. 26, 2019) (to be codified at 50 C.F.R. pt. 622).

¹³⁶ Id.

The Council then began work on Amendment 58 to the Reef Fish FMP to specify the new overfishing limits and acceptable biological catch for red grouper. This process took about 3 years, as Amendment 58 was subject to the full rulemaking procedures and required preparation of an EIS. NMFS published the notice of intent to prepare an EIS in April 2020. The Council submitted Amendment 58 to NMFS for approval following its October 2021 meeting. NMFS published a notice of availability and request for public comments on December 9, 2021. Following the 60-day comment period, NFMS approved Amendment 58 on March 9, 2022. Proposed regulations to implement Amendment 58 were published on January 9, 2022 with a 30-day comment period. NMFS received 81 comments on the notice of availability for Amendment 53 and 102 comments on the proposed rule. Final regulations were published by NMFS on May 2, 2022.

Table 2 provides a summary of select Council actions discussed above. Council actions are sorted in ascending order based on total time to implement the action. Total time was measured from when the action was first discussed in Council meeting minutes to when a final rule implementing that action was published in the Federal Register. The table also lists the associated NEPA action.

Amendment 53 to the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico, 85 Fed. Reg. 22137 (Apr. 15, 2020).

¹³⁸ Amendment 53, 86 Fed Reg. 70078 (proposed Dec. 9, 2021) (to be codified at 50 C.F.R. 622).

Amendment 53, 87 Red. Reg. 25573 (May 7, 2022) (to be codified at 50 C.F.R. 622).

¹⁴⁰ Amendment 53, 87 Fed. Reg. 2737 (proposed Jan. 19, 2022) (to be codified at 50 C.F.R. 622).

¹⁴¹ Amendment 53, 87 Red. Reg. at 25573.

¹⁴² Id

Table 2. Timeline Summary of Council Actions

Action	Council	Date of First Council Action/Discussion	NEPA Action	Date of NMFS Publication of Final Rule	Total Time (Days)
IFQ Transfer Provisions Emergency Action	North Pacific	May 15, 2020	CE*	June 25, 2020	41
Pacific Whiting Emergency Action	Pacific	April 10, 2020	CE*	June 19, 2020	70
Framework Adjustment 34 to Atlantic Sea Scallop FMP	New England	December 9, 2021	EA	March 30, 2022	111
Illex Squid 2022 Annual Specification Adjustment	Mid-Atlantic	March 15, 2022	CE*	August 9, 2022	147
Amendment 8 to Northeast Skate Complex FMP	New England	January 9, 2022	CE	June 30, 2022	172
Red Grouper Emergency Action	Gulf of Mexico	October 23, 2018	EA/FONSI	May 17, 2019	265
Golden Tilefish Emergency Action	Mid-Atlantic	March 26, 2020	Supplemental Information Report	December 21, 2020	270
Framework Adjustment 57 to Northeast Multispecies Fishery FMP	New England	June 15, 2017	EA/FONSI	May 1, 2018	320
Amendment 58 to Reef Fish FMP (Red Grouper)	Gulf of Mexico	May 26, 2020	EIS	May 2, 2022	767
Amendment 8 to Herring FMP	New England	February 26, 2015	EIS	January 11, 2021	2,146

^{*} Documents reviewed did not state that a CE was used, but action likely qualified based on the nature of the action.

IV. Factors Affecting Nimbleness

A. Scientific Uncertainty

One of the primary challenges to nimbleness is that posed by data gaps and a lack of scientific understanding of key issues that need to be addressed in the FMPs to protect the species involved. There appears to be three key issues where scientific uncertainty can impact the nimbleness of the FMPs: the lack of usable data, barriers to communicating data collected, and failure to utilize models or other tools that collect or project data. Each of these barriers inhibits nimbleness in creating, amending, and implementing a management plan. While large-scale issues such as climate change are not disputed by federal agencies and projected impacts of climate change are documented in federal reports, there are still significant data gaps regarding the real world impacts of climate change on fisheries.¹⁴³

According to a study done by the United States Government Accountability Office (GAO), "[l]imited data and modeling information on the impacts of climate change on fisheries is a challenge to enhancing the climate resilience of fisheries." GAO conducted interviews with fishery management councils, NMFS regions, and stakeholders, and members from each group observed that, "there are limited baseline data for certain fish stocks[, which] restricts the ability to measure future changes against current conditions, such as detecting the impacts of climate change on fish stocks or predicting how species will behave under changing conditions, and making management decisions in response." This lack of data means agencies have less information on which to base management decisions.

Additionally, even where studies are being conducted, the research projects are not always focused on the time or geographic scale needed to help Councils incorporate the data into their management decisions. Research on the impacts of climate change are often based on a timescale projecting "for 10 years or more into the future, which are of limited use in fisheries management, which has a shorter-term focus of making decisions in the next few months or years." NMFS scientists face a similar problem: they also "need climate and ocean projections at shorter time scales to provide early warnings of near-term extreme events, such as marine heatwaves, and to incorporate near- and mid-term projections of ocean conditions into stock assessments for fisheries managers." Finally, modeling projects have historically provided projections of ocean conditions at "global, national, and regional geographic scales but often lacked detail needed to adequately address fisheries management issues on regional and subregional scales." These issues of modeling scales (e.g., time and geographic) make it difficult to include scientific research that does exist, and thus inhibits nimbleness in decision making on yearly or biennial bases for fisheries managed at a regional level.

According to NMFS, "The potential effects include increasing water temperature, ocean acidification, changes in atmospheric and ocean circulation, and more frequent and stronger weather events, and subsequent shifts in species distribution and productivity." NAT'L MARINE FISHERIES SERV., ACCOUNTING FOR SHIFTING DISTRIBUTIONS AND CHANGING PRODUCTIVITY IN THE FISHERY MANAGEMENT PROCESS: FROM DETECTION TO MANAGEMENT ACTION 3 (2018).

¹⁴⁴ U.S. Gov't Accountability Office, GAO-22-105132, Opportunities Exist to Enhance Climate Resilience 30 (2022).

¹⁴⁵ *Id.* at 29.

¹⁴⁶ *Id.* at 30.

¹⁴⁷ *Id.* at 30.

¹⁴⁸ *Id.* at 30.

Second, where data exists, it is not shared adequately, which can waste valuable time for fisheries managers to review the data and utilize it in their decision making. Data confidentiality agreements can limit or preclude sharing important data for up to two years, by which time the data is hard to use effectively for future management plans or amendments, and cannot be used at all for inseason or emergency actions.¹⁴⁹

Finally, even where studies are generating usable data and where it is shared and accessible, fishery managers say "climate variables are not generally incorporated into fish stock assessments[,] another reason why their use of climate information has been limited." Fisheries managers feel that were NMFS to incorporate "quality climate information in stock assessments" it would help them consider climate change impacts on fisheries in their management activities. However, NMFS has stated that they have a limited ability to do so, given the complex nature of marine ecosystems and the challenges of "identifying the relationship between different ecosystem variables." ¹⁵¹

Scientific uncertainty surrounding climate change inhibits nimbleness in several ways. First, there is not enough data and much of the existing data is not at the proper time or geographic scale. Next, where there is data, it is not effectively shared or freely accessible, which wastes time and resources and makes the data harder to rely on for management actions. And finally, where data exists and is accessible, it is largely not considered in management plans, which tend to look at the fish stocks but not climate change variables in determining appropriate management actions. These barriers should be addressed in order to promote nimbleness in the face of large scale impacts of climate change to fisheries.

B. Procedural Requirements

Federal law requires public participation in federal rulemaking and fisheries decision-making. For example, the MSA clearly outlines the procedure NMFS must follow when approving and implementing an FMP/amendment and associated regulations. When NMFS publishes a notice of availability for an FMP amendment, the public comment period must be open for 60 days. Given the length and complexity of most FMP amendments and their associated regulations and NEPA documents, a two-month public comment period is not necessarily unreasonable. However, the substance of these amendments are discussed at multiple Council meetings where interested parties have the opportunity to comment and learn about forthcoming NMFS actions. In such cases, maybe a shorter comment period would suffice. But regardless, a public comment period is still required by law for FMPs, amendments and proposed rules.

While Councils cannot avoid all procedural requirements, they can reduce procedural barriers by thinking ahead about desired management actions if certain circumstances arise in a particular fishery. Accountability Measures are one way to reduce the amount of procedure required to take action. Frameworking is another. However, the MSA does not prescribe a clear procedural roadmap for framework actions for all Councils. Differences in procedural requirements and practices between Councils may impact how easily a Council can respond to actions arising in a fishery.

¹⁴⁹ Id. at 30.

¹⁵⁰ *Id.* at 30.

¹⁵¹ *Id.* at 30.

For instance, it may take Councils more time to implement annual specifications in FMPs without a framework process as every change requires an FMP amendment. Based on a word search for "framework adjustment" in the Federal Register, the New England Fishery Management Council appears to implement such actions more frequently than other Councils. While many Councils adopt "Framework Amendments" and refer to framework actions, it is not clear that they are implementing the same processes as the New England Council or that their decision-making timelines are shortened. Additional guidance from NFMS regarding best management practices for incorporating frameworks into FMPs might help Councils take more advantage of this opportunity. Similarly, Councils might benefit from additional guidance regarding the use of CEs for framework actions to minimize redundant or unnecessary environmental reviews.

Emergency actions are another tool available to fishery managers to support nimbleness. As illustrated by the red grouper example discussed above, Councils can request emergency action to implement temporary management measures until more permanent measures are developed. Courts have generally upheld NMFS's authority to issue emergency actions without traditional rulemaking public notice and comment procedures. While it took the Gulf Council three years to develop and adopt Amendment 58, NMFS was able to implement lower catch limits for red grouper within six months of the Council's request for emergency action.

C. Endangered Species Act

The Endangered Species Act (ESA) was enacted to provide a program to conserve threatened and endangered species.¹⁵³ The ESA is administered by either the U.S. Fish and Wildlife Service or NMFS depending on the species.¹⁵⁴ These agencies are responsible for listing endangered or threatened species based on the best scientific and commercial data available.¹⁵⁵ A species can be listed as threatened or endangered based on any of five factors listed in the ESA, such as habitat destruction, overutilization, or other factors affecting the species' existence.¹⁵⁶

Once a species is listed as threatened or endangered, the goal of the ESA is to conserve the species to the point that the protections of the ESA are no longer required. ¹⁵⁷ Consultation must occur when federal actions, like issuing a permit, are likely to adversely affect the species or its critical habitat. ¹⁵⁸ The aim of consultation is to ensure that federal actions do not jeopardize the continued existence of the listed species or adversely modify its habitat. If the action is likely to jeopardize a listed species or its critical habitat then the agency must provide "reasonable and prudent" alternatives to the proposed action. If the proposed action is not likely to jeopardize a species, but will result in an incidental take of the species, the Secretary will provide the agency with an incidental take statement that authorizes a specific level of permitted take. ¹⁵⁹

See e.g., Ocean Conservancy v. Evans, 260 F. Supp. 2d 1162 (M.D. Fla. 2003); Parravano v. Babbitt, 837 F. Supp. 1034 (N.D. Cal. 1993); Trawler Diane Marie v. Brown, 918 F. Supp. 921 (E.D.N.C. 1995).

¹⁵³ 16 U.S.C. § 1531(b) (quotations omitted).

¹⁵⁴ 50 C.F.R § 402.01(b).

Economic consequences of listing a species are not considered during the listing stage.

The five factors are: 1) the present or threatened destruction, modification, or curtailment of the species' habitat or range; 2) overutilization of the species for commercial, recreational, scientific, or educational purposes; 3) disease or predation; 4) the inadequacy of existing regulatory mechanisms; or 5) other natural or manmade factors affecting the continued existence. 16 U.S.C. § 1533(a).

¹⁵⁷ 16 U.S.C. § 1532(3).

¹⁵⁸ 16 U.S.C. § 1536(a)(1).

A take is defined as, "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

16 U.S.C. § 1532(19). An incidental take is "an unintentional, but not unexpected, taking." What Does Take Mean Under the Endangered Species Act and What is Incidental Take?, NOAA FISHERIES, (last visited Oct. 27, 2022).

Fishery management decisions that could impact endangered or threatened species could be delayed due to the consultation process. However, NMFS often performs any required consultation concurrently with its NEPA review. In fact, the CEQ, the federal agency tasked with developing the implementing regulations for NEPA, states in its regulations that agencies should "to the fullest extent possible" complete an EIS analysis concurrently with other federally required reviews, including those under the ESA. ¹⁶⁰ If these concurrent analyses occur, the ESA may not delay the decision making process as much as if the NEPA and ESA documents are prepared separately.

D. Litigation

Litigation is another factor that may affect nimbleness. While the MSA contains no "citizen suit" provision authorizing private citizens to challenge agency action, there are legal mechanisms available for industry, environmental, or other interested parties to bring suit against NOAA and NMFS. The APA allows interested parties to challenge final agency actions, and thus, the APA can be used to challenge actions NMFS takes under the MSA or NEPA.

A majority of lawsuits brought against NMFS over fisheries management decisions are by industry fishers or groups. ¹⁶¹ One study found that after 1996, 54% of federal fisheries lawsuits were brought by fishers and 32% were brought by environmental groups. ¹⁶² The same study also found that lawsuits brought by environmental groups usually involved alternative environmental statutes, such as NEPA or the ESA, rather than the MSA.

Section 706 of the APA provides that a court must set aside agency actions or findings that are arbitrary and capricious. Other claims that can be brought under Section 706 include claims for:

1) failure to provide proper procedures, such as notice and comment opportunities; 2) an agency action that is made not in accordance with law; and 3) unreasonable delays in agency procedures and decision-making. APA claims related to fishery management usually involve either improper notice and comment procedures or arbitrary and capricious agency actions

APA claims may impact nimbleness. For instance, trying to take short cuts by not following proper notice and comment procedures could result in APA claims. Likewise, NMFS and the Councils must provide thorough and comprehensive data gathering and publication explanations when issuing FMPs or amendments to proactively avoid APA arbitrary and capricious claims. For example, in *Flaherty v. Bryson*, the court held that an FMP amendment was arbitrary and capricious and violated the APA when the agency did not demonstrate "reasoned decision-making." On the other hand, in *Oceana v. Pritzker*, the court found NMFS did not violated the APA when deciding not to adopt in-season bycatch monitoring measures because it did not act arbitrarily and capriciously. ¹⁶⁵

¹⁶⁰ 40 C.F.R. § 1502.24(a).

Robin Kundis Craig & Catherine Danley, Federal Fisheries Management: A Quantitative Assessment of Federal Fisheries Litigation Since 1976, 32 J. Land Use 381, 407 (2017).

¹⁶² Id.

¹⁶³ 5 U.S.C. § 706(2)(A).

¹⁶⁴ 850 F.Supp.2d 38 (D.D.C. 2012).

¹⁶⁵ 24 F.Supp.3d 49 (D.D.C 2014).

APA lawsuits can be used to challenge agency actions that are not made in accordance with law. In 1993, NOAA's Office of General Counsel issued a legal opinion concluding that "aquaculture facilities are subject to the [MSA] because they engage in the 'harvest' of fish from [federal waters]."¹⁶⁶ In 2009, the Gulf of Mexico Fishery Management Council approved an FMP that would establish a comprehensive regulatory framework for offshore aquaculture in the Gulf of Mexico, referred to as the Gulf Aquaculture Plan or "GAP."¹⁶⁷ However, in August 2020, the Fifth Circuit affirmed the Louisiana District Court's holding, finding that the GAP regulations exceeded the statutory authority granted to NMFS in the MSA and struck down the regulations.¹⁶⁸ This litigation is a cautionary tale regarding the time that can be wasted if the agency goes too far beyond the bounds of its commonly understood authority.

V. Pacific Salmon Case Study

This section presents a case study of an endangered fish stock managed by a fishery management plan in order to illustrate the interplay between Council management actions and nimbleness in responding to environmental stimuli. While the management plan does not mention nimbleness as a specific management goal, this case study highlights certain aspects of the management plan which have nimbleness integrated and allow for a flexible approach to managing an endangered fish stock.

The Sacramento Winter-run Chinook (SWRC) salmon is an evolutionarily significant unit, or ESU, managed by the Pacific Fishery Management Council under the Pacific Coast Salmon FMP. ¹⁶⁹ The Plan, implemented in 2016, manages 28 Chinook salmon stocks, 21 coho stocks, and 1 pink salmon stock in the Pacific Ocean. It has been amended 22 times, and there have been 36 total inseason actions, as of September 2022. ¹⁷⁰ Salmon stocks are reviewed on an annual basis, unlike species managed by other FMPs, such as the Pacific Coast Groundfish FMP, which calls for stock review every two years. ¹⁷¹ Thus, the salmon stocks managed by the Plan are inherently managed with more flexibility and nimbleness than plans reviewed biennially, because the review process occurs more frequently.

The annual review season for salmon begins on May 16th, and each year the Council follows a preseason process to develop recommendations that spans from January to the second week of May. This process starts with announcements of Council meetings and public hearings and ends with publication of the final management plan in the Federal Register. Additionally, with help from the Salmon Technical Team (STT), the Council develops four preseason documents to guide its management decisions: (1) a review of the salmon fisheries for the previous year (Stock Assessment and Fishery Evaluation (SAFE) document),

Memorandum from Jay S. Johnson, NOAA Deputy General Counsel, & Margaret F. Hayes, NOAA Assistant General Counsel for Fisheries, to James W. Brennan, NOAA Acting General Counsel 1 (Feb. 7, 1993) (on file with authors).

Presentation by NOAA Fisheries, NOAA Fisheries Gulf Aquaculture Permit (GAP) Program for Federal Waters of the Gulf of Mexico, slide 3 (Oct. 14, 2016).

Gulf Fishermens Ass'n v. Nat'l Marine Fisheries Serv., 968 F.3d 454 (5th Cir. 2020).

PACIFIC FISHERY MGMT. COUNCIL, PACIFIC COAST SALMON FISHERY MANAGEMENT PLAN FOR COMMERCIAL AND RECREATIONAL SALMON FISHERIES OFF THE COASTS OF WASHINGTON, OREGON, AND CALIFORNIA AS REVISED THROUGH AMENDMENT 22 (2022).

A 23rd amendment is currently under development, and a notice and request for public comments was published August 18, 2022. *Id. See* Inseason Actions #34 Through #36, 87 Fed. Reg. 54171 (Sept. 2, 2022) (to be codified at 50 C.F.R. 660).

¹⁷¹ Fact Sheet: Groundfish, Pacific Fishery Mgmt. Council (Jan. 20, 2021).

Fact Sheet: Salmon, PACIFIC FISHERY MGMT. COUNCIL (Feb. 18, 2021).

(2) Preseason Report I: the forecast used to set salmon fisheries, (3) Preseason Report II: a description of the Council's proposed management alternatives and their impacts, and (4) Preseason Report III: the STT's analysis of fishery management measures adopted by the Council for submission to the Secretary of Commerce. The three preseason reports collectively form the "Environmental Assessment (EA) to comply with National Environmental Policy Act (NEPA) requirements[.]" 1714

Salmon stocks are also monitored by the Pacific Salmon Commission, which implements provisions of the 1985 Pacific Salmon Treaty guiding harvest and conservation efforts between the U.S. and Canadian federal governments, states, tribes, and industry groups. While the PSC does not govern the salmon stocks, they provide management recommendations to be reviewed in the U.S. by NMFS. Additionally, the SRWC salmon is one of NMFS's Species in the Spotlight, which is an initiative "to provide immediate, targeted efforts to halt declines and stabilize populations, focus resources within and outside of NOAA on the most at-risk species, guide agency actions. . ., increase public awareness and support for these species, and expand partnerships." This means that not only is the SWRC salmon impacted by monitoring and population rehabilitation efforts through the Management Plan, it is the subject of multiple targeted efforts to restore population levels, and Council actions must take into account these other efforts, as well as the requirements of the ESA. This interplay highlights one barrier to nimbleness regarding the SWRC salmon specifically, as it is one of the more closely monitored salmon stocks.

Nimbleness is built into the FMP as it provides for in-season and out-of-season adjustments for salmon management. Actions that modify conservation objectives must be done through a plan amendment or through notice and comment rulemaking.¹⁷⁹ In-season actions do not require notice and comment periods and may be taken to fulfill the objectives of the management plan; they may be "fixed" or "flexible."¹⁸⁰ Fixed in-season actions include automatic closures when quotas are met and rescinding closures if yields are overestimated. Flexible in-season actions include modifications of quotas, fishing seasons, catchable species, gear restrictions, boundaries, and others.¹⁸¹ While these in-season notice actions are not subject to notice and comment periods or public input, they must be published in the Federal Register as soon as practicable.¹⁸² According to the in-season actions published to the Federal Register, "NMFS is authorized to implement in-season management actions (either directly or in consultation with the Councils and appropriate State Directors) to modify fishing seasons and quotas as necessary to provide fishing opportunity while meeting management objectives for the affected species."¹⁸³

Annual Season Management Process, PACIFIC FISHERY MGMT. COUNCIL (last visited Oct. 27, 2022).

¹⁷⁴ PACIFIC FISHERY MGMT. COUNCIL, 0648-BK78, PRESEASON REPORT III: COUNCIL ADOPTED MANAGEMENT MEASURES AND ENVIRONMENTAL ASSESSMENT PART 3 FOR 2022 OCEAN SALMON FISHERY REGULATIONS (2022).

What Is the Pacific Salmon Commission?, PACIFIC SALMON COMM'N (last visited Oct. 27, 2022).

¹⁷⁶ Id.

¹⁷⁷ Species in the Spotlight: Sacramento River Winter-run Chinook Salmon, NOAA FISHERIES (Nov. 19, 2020).

PACIFIC FISHERY MGMT. COUNCIL, PACIFIC COAST SALMON FISHERY MANAGEMENT PLAN FOR COMMERCIAL AND RECREATIONAL SALMON FISHERIES OFF THE COASTS OF WASHINGTON, OREGON, AND CALIFORNIA AS REVISED THROUGH AMENDMENT 22 (2022).

¹⁷⁹ *Id.* at 20.

¹⁸⁰ *Id.* at 78.

¹⁸¹ *Id.* at 79.

¹⁸² Id.

¹⁸³ In-season Actions #34 Through #36, 87 Fed. Reg. 54171 (Sept. 2, 2022) (to be codified at 50 C.F.R. 660).

The processes included in the FMP are designed to allow flexibility both in-season and during the pre-season review period. Preference is given to actions taken during the preseason review period, but in-season actions can be taken where necessary. This quick turnaround allows for action to be taken based on available data and changing circumstances. However, because the actions taken are generally in direct response to quantifiable data such as catch and salmon size, there is little information about how the Plan responds to large-scale, systematic changes such as climate change, where responses must be larger in scope than a single season.

VI. Conclusion

As illustrated by the examples discussed in Section III, NMFS and the regional Fishery Management Councils have multiple tools available to integrate more nimbleness in their decision-making. There does not appear to be any specific legal barrier within the MSA framework that constrains decision-making. The incorporation of accountability measures in FMPs allow NMFS to take immediate action when designated circumstances arise. NMFS can implement emergency action upon a Council's request within a matter of months. Framework processes allow annual catch limits to be adjusted and set in less than a year.

The federal rulemaking process does not appear to excessively delay implementation of Council action. NMFS acts promptly upon receipt of FMPs, amendments, regulations, recommendations, and requests from Councils. A study by researchers at the University of Wisconsin in 1993 found that NOAA finalized rules the fastest among the fifteen agencies that used APA rulemaking processes the most. ¹⁸⁴ At that time, NOAA's median time to finalize rules was three months, compared to twenty-four months for the FDA. ¹⁸⁵ The results of this study would likely be similar today based on the small survey of NMFS actions reviewed as part of this report.

The lengthier part of the decision-making process is on the Council side. Fisheries management is a complex process that is heavily reliant on scientific data. Emerging knowledge about the impacts of climate change on fisheries must be integrated into existing stock assessment models and management frameworks. While Councils can build in some nimbleness to FMPs by authorizing NMFS to make inseason adjustments, it takes time to understand and respond to emerging environmental conditions.

Further, the nature of the action itself may affect nimbleness. Simple, uncontroversial actions can go through the process quickly, like amendments that are administrative in nature such as Amendment 8 by the New England Fishery Management Council discussed above. Amendment 8 was an administrative change to the FMP's objectives that used a CE for NEPA compliance and only received one public comment. However, other actions may be of a nature that they cannot be done quickly. For example, actions that affect important ecosystems or protected species will require more thorough NEPA and ESA analysis and are likely to elicit a greater public input at both the Council level and to the NMFS proposed regulation. These actions may also present a great risk of litigation. A more detailed scientific record and a more thorough response to comments will be required, both of which take time.

James Hobbs, Is the Rulemaking Process Really a Quagmire?, REGUL. REV. (Jan. 17, 2013),

¹⁸⁵ Id

Concerns are often raised about the ability of Councils to respond quickly when the distribution of a fish stock moves across Council boundaries. While shifts in stock distributions are likely long-term impacts of climate change, it is unlikely that such shifts into new Council boundaries will happen at such a rapid pace that fishery managers are unable to respond to them before the stock has crossed boundaries completely. Although the MSA does not currently set forth a process by which management of an FMP can be transferred to another Council, Councils could anticipate the need for future management of stocks migrating towards their jurisdiction and take steps to start developing fishery management plans for those stocks in advance. The receiving Council could develop an FMP that is modeled after the one originally governing the stocks as a way to streamline their own decision-making process rather than creating an entirely new management plan.

Efforts like the East Coast Climate Change Scenario Planning¹⁸⁷ process can help fisheries managers scope out the possible range of climate change impacts on fish stocks under their jurisdictions. Gaining a deeper understanding of the possible impacts can provide the foundation for the development and incorporation of a range of management measures into FMPs. The more fishery managers can anticipate the desired management response to possible conditions, the more nimbleness they can build into FMPs to authorize NMFS to implement such responses in the event those conditions arise.

U.S. GOV'T ACCOUNTABILITY OFF., supra note 3, at 51.

¹⁸⁷ East Coast Climate Change Scenario Planning, MID-ATLANTIC FISHERY MGMT. COUNCIL, (last visited Nov. 9, 2022).