U.S. Input for UN Fish Stock Agreement 15th Informal Consultation of States Parties: "Implementation of an ecosystem approach to fisheries management"

(i) Experience in the implementation of an ecosystem approach to fisheries management, including in relation to:

(a) assessing the impacts of fishing on the ecosystem, including on associated or dependent species;

All United States fisheries management must comply with a variety of U.S. laws that require the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) to assess the impacts of fisheries management measures on the ecosystem, including target and non-target species, habitats, and ecosystems. These laws include the National Environmental Policy Act, the Marine Mammal Protection Act, the Endangered Species Act, the Coastal Zone Management Act, and others. For example, in the Atlantic, the U.S. is working with the International Commission for the Conservation of Atlantic Tunas (ICCAT) on bycatch reduction, ecosystem report card, and other Ecosystem-Based Fishery Management (EBFM) related issues through the ICCAT's Sub-Committee on Ecosystems. Through this collaboration, the U.S. is also developing management strategy evaluations and harvest control rules, including a multispecies management strategy evaluation. More details about this work can be found in the Atlantic Highly Migratory Species EBFM Implementation Plan¹.

(b) addressing the impacts of fishing on the ecosystem, including on associated or dependent species;

U.S. law requires NOAA Fisheries to address the impact of fishing on the ecosystem. For example, under the Magnuson Stevens Fishery Conservation and Management Act (MSA), the primary federal law that governs the management of U.S. federal fisheries, fishery management measures must minimize adverse effects of fishing on habitat and reduce bycatch to the extent practicable. The Marine Mammal Protection Act requires the protection of all marine mammals, and the Endangered Species Act requires the conservation of threatened and endangered species as well as the ecosystems upon which those species depend. Some fishery management measures include time and area closures or modifications or cessation of fishing activities to limit interactions with essential fish habitats and protected species.

(c) incorporating economic, social and cultural aspects;

In 2016, NOAA Fisheries issued an EBFM Policy which defines EBFM, describes its benefits, discusses how it relates to existing living marine resources management legal authorities and requirements, and establishes a framework of six guiding principles. The policy also recognizes past progress made in the implementation of an ecosystem based approach in U.S. fisheries through the work of NOAA Fisheries and the U.S. Fishery Management Councils. NOAA Fisheries also issued an EBFM Roadmap in 2016 that provides additional detailed guidance on

¹ https://www.fisheries.noaa.gov/national/ecosystems/ecosystem-based-fishery-management-implementation-plans

implementing the EBFM Policy in U.S. fishery management. In 2019, NOAA Fisheries released regional EBFM implementation plans. These plans include specific actions the U.S. has recently taken and intends to undertake with partners and stakeholders to continue to advance EBFM for the next five years. The Atlantic Highly Migratory Species implementation plan, in particular, is focused on straddling and highly migratory species.

There are a number of requirements in U.S. laws, regulations, and policies that require NOAA Fisheries to incorporate economic, social and cultural aspects into fishery management decision-making. For example, under the MSA, there are a variety of economic, social, and cultural-related requirements with which all fishery management plans and associated regulations must be consistent. These requirements include prohibitions against discrimination among residents of different states when establishing harvest allocations, requirements to minimize costs, and requirements to take into account the importance of fishery resources to fishing communities using economic and social data. In addition, the MSA requires that fishery management measures minimize adverse economic impacts on fishing communities to the extent practicable.

(d) incorporating environmental factors affecting marine ecosystems, including adverse impacts of climate change and ocean acidification;

Under the National Environmental Policy Act, NOAA Fisheries is required to take a broad range of environmental factors into consideration for the present and foreseeable future when analyzing alternative fishery management measures. This consideration can include changing ocean conditions, including ocean acidification and shifts in species distribution and productivity. The degree to which these specific conditions are incorporated depends on the affected fisheries and the availability of information about those conditions and their impacts. In addition, NOAA Fisheries is increasingly using ecosystem status reports to complement stock assessments. These ecosystem status reports allow fishery managers to take into account broader ecosystem trends caused by shifting ocean conditions and associated risks as they consider management alternatives. For example, in the Pacific, the West Coast EBFM Implementation Plan² explains research exploring Pacific sardine and albacore tuna management and is meant to assist in the development of management strategy evaluations, as well as research to determine environmentally informed spatial bycatch risk of leatherback turtles in the swordfish fishery.

(ii) Lessons learned, best practices and challenges in the implementation of an ecosystem approach to fisheries management;

Best practices and lessons learned:

- Ensure that existing legal and policy frameworks provide the necessary authority to conduct EBFM;
- Gain broad buy-in on the definition, goals and benefits of EBFM amongst key partners and stakeholders;
- Develop an implementation approach that is flexible enough to account for unique needs and characteristics of different ecosystems and fisheries;
- Identify science and management gaps to implementation; and,

² https://www.fisheries.noaa.gov/national/ecosystems/ecosystem-based-fishery-management-implementation-plans

• Chart a course that is aspirational and achievable in the context of existing resources and information.

(iii) Actions needed to further strengthen the implementation of an ecosystem approach to fisheries management, including to address particular challenges faced by developing countries through capacity-building in accordance with Part VII of the Agreement.

- Implement ecosystem-level planning by building stakeholder and public support and clarifying ecosystem-based fishery management goals and objectives.
- Advance our understanding of ecosystem processes by strengthening monitoring of existing fisheries and their ecosystems to identify shifts and trends and use modeling to improve predictions of future ecosystem conditions.
- Prioritize vulnerabilities to ecosystems and their components through ecosystem-level risk assessments.
- Explore tradeoffs within ecosystems through the use of management strategy evaluations, scenario planning, indicators, and other tools.
- Incorporate ecosystem considerations into management by continuing to improve the delivery of ecosystem information into the existing fishery management decision-making process.
- Maintain resilient ecosystems and community well-being.