DIALOGUE

Current Developments in U.S. Fisheries Policy

Summary

The Trump Administration's approach to fisheries management appears to constitute a significant policymaking shift. Recent NOAA decisions, such as extending the Gulf of Mexico red snapper season or overturning an Atlantic States Marine Fisheries Commission decision to cut New Jersey's recreational quota for summer flounder, seem to go against the agency's traditional approach of placing scientific information at the center of fisheries decisionmaking. On January 25, 2018, ELI held a webinar to discuss these and other recent developments, and to assess the direction U.S. fisheries policymaking may take in the future. Below we present a transcript of the discussion, which has been edited for style, clarity, and space considerations.

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Monica Goldberg is Chief Counsel, Oceans, at the Environmental Defense Fund.
Mike Gravitz is Director of Policy and Legislation at the Marine Conservation Institute.
Shana Miller is Program Manager of the Global Tuna Conservation Project at The Ocean Foundation.

Xiao Recio-Blanco: For our first Environmental Law Institute (ELI) Ocean Seminar for 2018, we see this as a fantastic opportunity for us to engage with those in ocean resources management and for the conservation community at large to get together. I also want to thank the Naomi and Nehemiah Cohen Foundation, which has supported the ELI Ocean Seminars from its inception. In this Ocean Seminar series, we convene experts to engage about current topics in a productive way.

Fisheries policy is an extremely complex issue. As a former U.S. senator said a few years ago, "[F]isheries management isn't rocket science. It's actually more difficult."[1] Fisheries management decisions have huge political implications. Political representatives tend to tread carefully around fisheries policy because some of these decisions may seal their fate when the time comes to run for reelection.

Beyond political impact, fisheries policies have environmental, economic, and social consequences. Decisions not to impose certain catch limits can have serious consequences for the overall stability of our increasingly fragile ocean environment. Some management measures directly affect the livelihood of thousands of workers and their families, and indirectly impact hundreds of thousands of inhabitants in coastal communities across the United States. In many regions, shifting policies around fisheries go beyond mere economic impact and, in time, redraw cultural idiosyncratic concepts of life, labor, and even family values, and the millennia-old story of this fascinating relationship between humans and the sea.

American fisheries are so important that access to some of these fisheries helped shape human history itself, as we have learned from books like *Cod*.[2] American fisheries have been at the center of international conflict and negotiations, like the delimitation of the maritime boundary in the Gulf of Maine.[3] Fisheries have also been key topics of famous criminal cases like that of the "Codfather"[4] or the *Bengis* case.[5]

Our key legal instrument for fisheries management is the Magnuson-Stevens Act,[6] which, since its enactment in 1976, establishes a preeminent role of the federal government through the National Marine Fisheries Service (NMFS) in management of fishing activities in federal waters. Much of the decisionmaking process is left in the hands of the eight regional fishery management councils, which recommend fishery measures. Unless NMFS finds recommended measures inconsistent with the law, the agency must approve the management plans.

1. U.S. Senator Mark Begich, C-SPAN, West Coast and Pacific Fisheries (Jan. 30, 2014), http://www.c-span.org/video/?317504-1/hearing-federal-fisheries.
2. Mark Kurlansky, Cod: A Biography of the Fish That Changed the World (Penguin Books 1998).
3. International Court of Justice, Delimitation of the Maritime Boundary in the Gulf of Maine Area (Can/USA), 1984, *available at* http://www.icj-cij.org/en/case/67.
4. In 2017, Carlos Raphael, known as the "Codfather," pleaded guilty "to mislabeling hundreds of thousands of pounds of fish, a scheme that enabled him to evade federal fishing regulations and boost his profits." *See* Milton J. Valencia, *"The Codfather," a New Bedford Fishing Mogul, Pleads Guilty*, Boston Globe, Mar. 30, 2017, https://www.bostonglobe.com/metro/2017/03/30/the-codfather-new-bedford-fishing-mogul-pleads-guilty/wu6m0gPG7fD7EmL2AUv8dM/story.html.
5. United States v. Bengis, No. 13-2543 (2d Cir. 2015).
6. 16 U.S.C. §§1801 et seq.

Another significant element of our fisheries' legal framework is the national standards. At times, the legal requirements of these national standards are in tension with each other. A main challenge of fisheries management is to establish an adequate balance between them. To confront this difficult task, federal authorities have relied on the provision of scientific information and advice. Once mostly focused on natural or statistical sciences, federal authorities have gradually expanded the role of science in providing information for fisheries management to include the work of social sciences and legal studies, for example.

Despite being in office for a short period of time, the current Administration is already earning a reputation for seeking to do things differently. Several of its decisions on fisheries management have proved quite problematic. It is important to look at these new approaches and the differences with previous experiences in order to learn from these different perspectives and seek to establish the best available management processes.

We are lucky to have a terrific group of panelists today. I will provide a brief introduction about each of them.

Our first panelist is Shana Miller. Shana is the program manager on Global Tuna Conservation at the Ocean Foundation. In her role, she leads the Ocean Foundation's efforts to confront the problem of overexploitation of tuna stocks in the Atlantic and Pacific Oceans, providing advice to trigger the implementation of innovative conservation initiatives for Atlantic bluefin and Pacific bluefin tunas.

Shana Miller: Thank you, Xiao. I'm going to talk about the U.S. role in international fisheries, using Atlantic bluefin tuna as a case study. First, I will talk about international fisheries management of bluefin tuna and the U.S. role in that. Then, I will go into domestic implementation of the international rules here in the United States.

Atlantic bluefin tuna are managed internationally by the International Commission for the Conservation of Atlantic Tunas (ICCAT). ICCAT was formed in 1966, so it's been around for a long time. It's responsible for management and science of Atlantic tunas and the tuna-like species: fish like swordfish, marlins, and some pelagic sharks. There are 52 member governments in ICCAT. The United States is one of those 52 member governments and also one of the "quad" members, meaning that it's one of the four lead governments at ICCAT. The other three are Japan, Canada, and the European Union.

A little bit about Atlantic bluefin tuna: Atlantic bluefin are fished under a billion-dollar fishery, and is thus a highly valuable species. They've also been for decades a poster child of overfishing, along with cod. There are two separate populations of Atlantic bluefin tuna, an eastern and western. The western population primarily spawns in the Gulf of Mexico, whereas the eastern population spawns primarily in the Mediterranean Sea. The way ICCAT manages the species is basically by drawing a line down the middle of the ocean. The 2018 catch limit for the western stock is 2,350 tons, and in the east, 28,200 tons.

Now, not surprisingly, a highly migratory species like bluefin does not respect this management boundary. However, the Mediterranean Sea and the Gulf of Mexico bluefin populations do not interbreed. If a bluefin is born in the Gulf of Mexico, it returns to the Gulf of Mexico to spawn, just like a salmon would to its natal stream. That's why there are two separate genetic populations of this stock.

I'm going to focus exclusively on the western stock, since that is what the United States is most involved with managing. Like I said, western bluefin tuna has been a poster child of overfishing, and so a recent question is whether they have recovered. Importantly, this year was scheduled to be the recovery deadline for this population. Adopted in 1998, this recovery plan has been ongoing for 20 years. The population size remains severely depleted from years ago. Even from 1974, the population is just 45% to 69% of this already depleted level.

Unfortunately, the ICCAT scientists as part of a 2017 assessment did not make a firm conclusion about whether or not the stock has recovered. We, as a conservation group, went to ICCAT meetings last year to push for them to make a firm commitment to this recovery plan. In 1998, when the recovery plan was adopted, the catch limit was actually increased at that point. That not surprisingly led to further stock decline. Even though the catch limit remained high, the fisheries weren't able to catch enough tuna to reach the full catch limit. The catch limit was then brought down in large part due to U.S. leadership. The population responded by increasing slightly. Now, the catch limit has been increased quite dramatically for 2018.

Last year's catch limit was 2,000 tons. With the United States leading on western bluefin tuna management, they submitted a proposal, which was eventually adopted. It would make sense given that the stock is still severely depleted, in our opinion, to at least reduce the catch limit to 1,500 tons. That would prevent further stock decline. In actuality, there would be a strong case for a 1,000-ton catch limit because that would allow this depleted stock to continue to grow.

However, the U.S. proposal, which was adopted, was for 2,350 tons, which was not even analyzed by the scientists. But you can imagine, based on the values that were estimated by the scientists, what's going to happen to the stock based on this new quota. It is projected to eventually result in a population size lower than at any point since 1974, which again was a severely depleted population size at that point. This U.S. proposal was a significant departure from the U.S. position in the past many years. In the past decade or more, the United States has been a conservation voice at ICCAT. So, this was really disappointing to us that the United States promoted this quota that they know will lead to quite significant stock decline.

Looking a little bit on the domestic side, the United States is required under the Atlantic Tunas Convention Act,[7] which was passed in 1975, to implement domestically the international measures adopted at ICCAT. For

7. 16 U.S.C. §§971 et seq.

example, ICCAT prohibited directed fishing for bluefin tuna in the Gulf of Mexico, which as I mentioned is the primary spawning ground for western bluefin tuna, starting in 1982. The United States has been implementing that. There is a habitat area of particular concern, which the National Oceanic and Atmospheric Administration (NOAA) originally designated in 2009, and an expanded area of the habitat area of particular concern adopted by NMFS just last year.

However, even though targeted bluefin fishing has been prohibited there, there is a U.S. domestic longline fishery that operates in the Gulf of Mexico. With these longlines they fish up to 30 miles of lines with hooks descending from the mainline. That 30 miles is equivalent to 528 football fields. The longline fishery in the Gulf of Mexico is primarily targeting yellowfin tuna and swordfish, but as part of their fishing, they also catch more than 80 species as bycatch, including bluefin tuna, which are in the Gulf of Mexico only to spawn. The Gulf of Mexico is not a feeding ground because it's warmer than they like.

Because the longline fishery soaks its gear for up to 18 hours, many of these animals die. Of course, the bycatch in the Gulf of Mexico also includes, not just spawning bluefin tuna, but sea turtles, marine mammals, and a number of other fish species. Because of this, there was an effort to not only have the decades-old targeted fishing closure in the Gulf of Mexico, but to also try to get time/area closures to reduce bycatch in the Gulf longline fishery when the bluefin tuna were spawning. This effort started in earnest in 2005 with the petition from Earthjustice to NOAA Fisheries. That petition did not get much of a response. So in 2006, Earthjustice filed a lawsuit to have a time/area closure in the Gulf of Mexico.[8] That lawsuit was not successful.

In 2013, the Pew Charitable Trusts worked closely with the International Game Fish Association, representing recreational fishermen, as well as the American Bluefin Tuna Association, which represented commercial fishermen. This was a bit of strange bedfellows, having recreational fishermen, commercial fishermen, and environmentalists working on this campaign together to try to further restrict this longline fishery in the Gulf of Mexico to protect spawning bluefin tuna. That effort was successful. NOAA took action in 2014 to close two areas to longline fishing in April and May, the two peak months of spawning for bluefin tuna. These two areas combined equal about 27,000 square miles that are protected for bluefin tuna. This was an example of a really progressive action by the U.S. government to protect these spawning fish.

The question is, then, was that closed area successful? The tonnage of bluefin tuna discarded dead in the Gulf of Mexico decreased significantly from 2014 when there were no closed areas, to 2015 and 2016 when the closed areas were in place. It was approximately a 90% reduction in mortality coinciding with an approximately 30% reduction in the number of hooks set in the Gulf of Mexico, providing really successful protections for these fish. As part of this effort to close these areas in the Gulf of Mexico, there was a catch share program adopted as well for the longline vessels, and they were each given what's called an individual bluefin quota. Together in concert, these measures were really successful.

Is Amendment 7,[9] which adopted these regulations, at risk, particularly under the current Administration, which as we saw led to a huge change in the U.S. position on bluefin tuna internationally? Are we going to have the same threat to these domestic protections? In December 2016, the United States did increase flexibility of bycatch share in the Individual Bluefin Quota program. They increased flexibility still further in December 2017. This year, there's a three-year review of the entire program. There's certainly cause for concern that some of these hugely successful regulation packages will be rolled back.

I will leave it there for now. I want to thank the Pew Charitable Trusts that support my work, and I look forward to questions.

Xiao Recio-Blanco: I will turn it over to our next panelist, Michael Gravitz. Mike is the director of policy and legislation for the Marine Conservation Institute here in Washington, D.C. Mike leads the development of the Institute's advocacy positions on conservation and appropriations, and works with the U.S. Congress and the Administration to bring this into being. Among many other achievements, Mike helped pass the Magnuson-Stevens Fishery Conservation Law Reauthorization in 2006.[10]

Michael Gravitz: I'm going to talk about habitat. While the Magnuson-Stevens Fishery Conservation Act doesn't have a large number of statutory provisions that relate to habitat, without intact habitat, we don't have a healthy ocean and we don't have healthy fish populations. When we talk about fisheries, we should inevitably talk about one of the most important things that support fisheries, which is habitat.

What is habitat? In a terrestrial context, we all recognize what habitat is: for example, a deciduous forest, grassland, marsh, or even a geyser. In fact, I believe geysers are a habitat for bacteria and fungi that love very hot water and harsh chemicals. Most places on earth are habitat for something. We often talk about a habitat by naming the primary vegetation or the physical feature to which they are most visually connected. That's really an oversimplification of what habitat is. Each is really a unique collection of *abiotic*, or environmental, factors like temperature, pressure, depth, soils, chemistry, that sort of thing, together with a combination of vegetation, fungi, wildlife, and all sorts of other *biotic*, or living, things.

8. Blue Ocean Institute v. Carlos M. Gutierrez, 585 F. Supp. 2d 36 (D.D.C. 2008).

9. Atlantic Highly Migratory Species; 2006 Consolidated Atlantic Highly Migratory Species (HMS) Fishery Management Plan; Amendment 7, 79 Fed. Reg. 71509 (Dec. 2, 2014).

10. Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006, Pub. L. No. 109-479.

We may not be aware of all the habitats in which we live or which we provide to other creatures. For example, more than one-half the people on earth live in urban areas; and many of us live in houses or apartments. Those are habitats with particular abiotic and biotic features. Our bodies provide habitats for other things that we carry around with us: skin and gastrointestinal bacteria for example. Even our belly buttons contain specific fungi and bacteria. Essentially, habitats are everywhere. Apparently, there are even habitats deep underground where there is no light and very little oxygen. Bacteria can live on the heat and chemicals in the earth and rock.

You could be pardoned for not really knowing much about marine habitats or how they are described unless you are a SCUBA diver, curious fisherman, or marine scientist. After all, the ocean is opaque; and most of us think of the ocean as having at most a sandy or muddy bottom. In fact, the ocean has many of the same topographic features as land. There are mountains, hills, plains, valleys and canyons, to name a few, each of which may have its own special collection of marine life made up of plants and various classes of animals besides fish.

Marine scientists categorize these habitats in lots of different ways: the depth of the ocean, the amount of light that reaches that depth in the ocean, the steepness of the ocean's slope, the roughness of the bottom and whether the bottom is fine sediment or rocky. To make sense of all these combinations of characteristics, scientists have developed several systems of aggregating these factors. One such system operates on a very large spatial scale—one example extends along the entire West Coast of the United States—and divides the oceans into something called large marine ecosystems (LMEs). Each LME has a water temperature range, dominant currents, ocean chemistry, level of primary productivity, typical marine life, and so forth. There are other habitat-naming systems that operate on smaller spatial scales.

So, what do some typical habitats look like in the ocean? They include deep-sea canyons with steep sides and fast currents; fluffy sand and detritus at the bottom of the ocean; kelp forests with rockfish swimming among the fronds off the West Coast; cold-water corals in deep dark cold ocean; mesophotic corals that live at a depth of about 150 feet, spreading out so they can collect the maximum light available; and large tuna schools chasing forage fish in the open ocean in the light.

What are threats to ocean habitats? Fishing can be a threat. If we remove too many members of any single population or species, then we have essentially changed the relationship between parts of the food web. Too few predators, and populations of what they eat explode. Too few prey, and the predators go hungry. We can end up with populations getting out of balance and the composition of species changing. For example, if we remove too many algae-eating fish in reefs, like parrotfish, warm water coral reefs can be smothered by a coating of algae and die. And when the corals die, with less structure to support surface algal growth, the parrotfish go away. In this fashion, fishing can cause changes to habitat indirectly.

Fishing gear can also cause direct changes to habitat. For example, if a bottom trawl sweeps across a field of corals and sponges, the corals and sponges are not going to be the same after the net and big heavy wooden doors pass over. Without this habitat of corals and sponges on the bottom, sometimes called bottom structure by scientists, fish that need cover for protection against predators or to attach eggs to, disappear.

Climate change is a huge threat to habitat. Ocean warming, for example, causes coral bleaching. If corals are bleached long enough, they die and the habitat changes. There are other things that cause habitat damage, such as dredging and filling, anchoring, and offshore drilling. But those activities are less important in most places compared to fishing, climate change, and widespread pollution problems like plastics and nutrient enrichment that causes dead zones with no oxygen in the water column.

Why do we care about habitat? What is its function? You might as well ask what the function of your house is or the park or the university or school that you went to. All of the activities in the life cycle of organisms use some kind of habitat, sometimes the same habitat for their entire lives. Sometimes, at different life stages in a marine animal's life, they need different kinds of habitat. All of the things that live in the sea need some kind of habitat for finding food, for finding each other, for spawning and aggregating, and so forth. Without each kind of habitat that fish or other marine life need at each life stage, the population becomes diminished or finds a new home.

Let's examine the statutes and tools that are available for protection of ocean habitat. First, we have the Magnuson-Stevens Fishery Conservation Act, which requires the regional fishery management councils to identify important habitats. There is the National Marine Sanctuaries Act (NMSA),[11] which helps create marine sanctuaries. We have the Endangered Species Act (ESA),[12] under which we can designate critical habitat for marine life and limit or stop harvest. The Marine Mammal Protection Act (MMPA)[13] also gives us the ability to designate critical habitat. We have the Antiquities Act of 1906,[14] originally envisioned to create monuments on the land and now recently used to create some very large marine monuments in the Pacific that protect vast areas of habitat from fishing and other threats. We have the national wildlife refuges and the national estuarine research reserves, which also exist to conduct scientific experiments within habitat.

How well do these statutes work at protecting marine habitat? Let's just say these tools work very unevenly and differently from place to place. Some regional fishery management councils (the regional bodies that set catch limits, gear restrictions, and seasons for commercial and recre-

11. 16 U.S.C. §§1433 et seq.
12. 16 U.S.C. §§1531-1544, ELR Stat. ESA §§2-18.
13. 16 U.S.C. §§1361-1383b, 1401-1406, 1411-1421h, ELR Stat. MMPA §§2-410.
14. 54 U.S.C. §§320301-320303.

ational marine fishermen) care about preserving habitats, and others don't. Habitat protection tends to require lots of ocean data, and to be a very expensive and lengthy process for nongovernmental organizations (NGOs) like the Marine Conservation Institute and others to engage in. It's also an expensive process for fishermen and fishery management councils to engage in.

Probably the strongest statute for habitat protection is the Antiquities Act, which has been used by presidents in recent years to create several no-take marine monuments in the Pacific and Atlantic Oceans. Twenty-five percent of the U.S. exclusive economic zone is now in marine monument status, with no fishing or very little fishing allowed. Unfortunately, as an executive branch action by the president, monuments can be modified to some degree, and arguably may be canceled, by subsequent leaders.[15] President Donald Trump, for example, appears interested in doing just that to several marine monuments in the Pacific.

We also have marine sanctuaries, which typically don't provide much habitat protection. When the Marine Conservation Institute studied this several years ago, we found that about one-half the area of marine sanctuaries is bottom-trawled or has some other kind of bottom contact gear being used. Bottom contact gear like trawls or bottom longlines almost always hurts marine habitats. Marine sanctuary status does normally remove these areas from the potential for offshore drilling, dredging and filling, and some other minor threats, so it's not nothing.

The Magnuson-Stevens Act also has a process for identifying Essential Fish Habitat (EFH). These are habitats shown by scientific studies to be important for various life stages (e.g., spawning, larval growth, juvenile development, etc.) of commercial fish populations. Every five years, the regional fishery management councils are required to examine whether newly developed scientific information is available to identify new areas of EFH, and if so, then new areas of EFH are supposed to be identified.

Unfortunately, there is no statutory requirement to do anything special to protect these EFH places from fishing or fishing gear once they are identified. Applying some sort of protection is optional. In some cases, this process of identifying EFH drags on for years or decades. The New England regional council has recently finished up its EFH process after 14 years.

Within EFH areas, the councils can identify even more special habitats, called Habitat Areas of Particular Concern (HAPC). These are places where fish aggregate to spawn, areas with unusually productive concentrations of food or bottom structure. Again, the fishery management councils are not required to take any particular action to protect HAPC locations after having identified them.

As you can imagine, there are a number of problems with this regional council-driven process for identifying and protecting marine habitat. There is no requirement to identify anything, just to examine the issue every five years. There are no requirements to employ protective measures for those places once you have identified them. The process, standards, and intentions vary from fishery management council to fishery management council. Some are good and well-intentioned; others are not.

The Magnuson-Stevens Fishery Conservation Act Amendments of 2007 also authorized a program to identify deep-sea corals and sponges and their habitats in each region of the U.S. oceans. The program, focusing in turn on each region of U.S. waters for several years, has produced groundbreaking research and many discoveries. It has identified new species of corals and sponges, expanded geography for some species, and discovered many new areas of deep-sea communities and new associations between deep-sea corals and other marine life. When the program has finished its work, scientists and ocean managers will have a whole new view of what lies in the deep seas around the United States, a vast area that is much larger than the continental shelf around the United States. We will know what areas ought to be put off-limits to protect these slow-growing, fragile communities from the impacts of extractive activities like bottom trawling, trap fishing, and oil and gas drilling.

As for the MMPA and ESA, areas given critical habitat designations under these statutes do not receive much protection from extractive activities, but they do trigger some consultations when the government is deciding to do something or allow something that might make the habitat in those areas even worse.

What kinds of things can we do to improve the statutes? Well, there are quite a few things. First, we've got to keep the habitat protections that are already in place. The Administration has targeted the big marine monuments in the Pacific and the one in New England. It's targeted some sanctuaries potentially for opening them up to offshore oil drilling. We ought to try to preserve them since we, as a community, worked very hard to get them.

We ought to keep the Antiquities Act functional as an option for designating marine monuments in the future. There are again some legislative attacks and attempts to undo that in Congress. And we ought to try to improve the Magnuson-Stevens Act while it's being reauthorized over the next year or two in terms of how EFH and HAPC areas are identified and protected. We also need to improve how deep-sea corals and sponges are assessed, identified, and protected. Those are the big things that we could do to improve the habitat situation in the United States.

What could we do worldwide to protect habitat better? After all, the United States is a member of the world community, and the United Nations is currently in a discussion about protecting areas of the ocean beyond national boundaries, also called Areas Beyond National Jurisdiction or ABNJ. According to the Atlas of Marine Protection, a database that contains data on all the marine protected areas (MPAs) in the world and what categories of protection they fall into, only about 2% of the ocean is strongly

15. *But see* Bruce Fein & W. Bruce DelValle, *New Wine in Old Bottles: Distorting the Antiquities Act to Aggrandize Executive Power*, 48 ELR 10300 (Apr. 2018).

protected in reality and that means only 2% of the habitat is really protected.[16] Another 2% to 3% of the ocean has protected area boundaries on a map, but offers little protection in reality. These are "paper parks." Two percent has been designated as protected by a government but not yet implemented with a management plan, and 2% has been proposed in some speech given by a political leader somewhere at some point in the world. So, you get up to about 8%, of which about 2% is really providing the ocean some sort of benefit and protecting habitat to a major degree.

The world's goal for this kind of protection of marine biodiversity with marine reserves is 10% of the ocean by 2020.[17] Depending on what categories you count for real protection, we're either close (at 8%) or pretty far away (at 2%) from a real 10% by 2020. We feel that the real level of protected areas with boundaries, a management plan, and some monitoring is around 2%.

The picture is actually worse since most scientists agree that the world's goal for ocean conservation with marine reserves should be 30%, not 10%. Both the World Parks Congress and the International Union for Conservation of Nature recommend[18] that we protect about 30% of the representative areas in the world's oceans to create sufficient resilience to the changes that are happening in terms of ocean warming and acidification and fishing and other things so that our children and our children's children will have a healthy ocean and healthy fisheries.

A scientist as august as E.O. Wilson advocates strongly for setting aside one-half the ocean and one-half the land to be protected in some status as a way of offsetting the global changes and extinctions that are now happening. We need more diversity in the locations of these MPAs. For example, most of the MPAs in the United States are in the Central Pacific. We need quality standards for MPAs and incentives to create more high-quality ones. To provide an incentive for more and better MPAs, the Marine Conservation Institute has initiated a system of awards for the best MPAs called the Global Ocean Refuge System.[19] The awards are like the "Ocean Oscars."

Xiao Recio-Blanco: Thank you, Mike. I think that sometimes marine habitat management gets so overlooked because we still have in the legal framework this tendency to consider ocean management measures in a fragmented way. But of course there is a very strong connection between MPA management, fisheries management, and essential habitat protection.

With that, we can turn to our final panelist, Monica Goldberg. Monica is the chief counsel for oceans at Environmental Defense Fund (EDF). In this role, she manages EDF's work on legislative and administrative initiatives and oversees annually the litigation undertaken by the EDF U.S. Oceans Program. She also coordinates the U.S. program's work on highly migratory species.

Monica Goldberg: Thanks for the opportunity to talk about fisheries policy in the Trump Administration and the 115th Congress. Starting out with the executive branch, I'd say that two defining paradigms of the Administration are an antiregulatory agenda and prioritization of user groups of natural resources. So, I'm going to discuss these two underlying dynamics and how they play out in fisheries using two examples, the Pacific groundfish fishery and the Gulf of Mexico recreational red snapper fishery.

First, all regulations are not created equal. Very early on, the Administration issued Executive Order (EO) No. 13771,[20] known as the "Two-for-One" EO. That EO requires that agencies eliminate two regulations for every one regulation that they enact. Of course, it's animated by the idea that regulations restrict economic activity. But if you're a fisherman accessing federally managed natural resources, such as a Pacific groundfish fisherman, you can't get to that resource without regulations. So, fairly immediately, the Office of Management and Budget exempted all routine fishing regulations from the Two-for-One EO, but not all fishery regulations, which we'll come back to.

The Administration's antiregulatory effort may actually help some environmental efforts. Since 2012, the Pacific groundfish fishery has shown some amazing conservation results under a catch share program known as the individual fishing quota (IFQ). That program allows fishing entities to receive a proportional share of various groundfish quotas, and with 100% monitoring and accountability for every pound that is caught—not landed—of both target and bycatch species. As a result of that program, we've had a remarkable decrease in discards—reductions in the catch of overfished rockfish species relevant to the impact of trawls on habitat; reduction in the amount of area trawled relative to the previous pre-IFQ amounts; and reduction in the amount of fuel used to catch the same amount of fish. So, there have obviously been some good benefits.

Unfortunately, the economics of this fishery have not kept up. Essentially, revenues have been flat even as these species recovered and, for example, were changed from red to green on the Monterey Bay Aquarium seafood selector list. Part of that problem is because of leftover regulations from before the catch share. When you have full accountability under catch shares, you don't need a lot of the regulations that were previously put in place to restrict fishing mortality—for example, mandating inefficient gear or requiring people to only fish at certain times of the year.

16. Marine Conservation Institute, Atlas of Marine Protection, *Home Page*, http://www.mpaatlas.org (last visited Feb. 17, 2018).
17. Convention on Biological Diversity, *Aichi Biodiversity Targets*, https://www.cbd.int/sp/targets/ (last visited Mar. 8, 2018).
18. *See World Parks Congress Recommends Target of 30% No-Take MPA Coverage Worldwide*, MPA News (Dec. 31, 2014, 2:29 PM), https://mpanews.openchannels.org/news/mpa-news/world-parks-congress-recommends-target-30-no-take-mpa-coverage-worldwide, and *IUCN Members Approve 30%-by-2030 Goal for MPAs—Most Ambitious Target so Far for MPA Coverage*, MPA News (Oct. 27, 2016, 5:37 PM), https://mpanews.openchannels.org/news/mpa-news/iucn-members-approve-30-2030-goal-mpas-%E2%80%94-most-ambitious-target-so-far-mpa-coverage.
19. Global Ocean Refuge System, https://globaloceanrefuge.org/ (last visited Feb. 25, 2018).
20. Exec. Order No. 13771, 82 Fed. Reg. 9339 (Feb. 3, 2017).

If you're counting every fish, you don't really need to do that anymore. As soon as the IFQ was put in place, NMFS stated that they would clear these old regulations from the books. But it has been several years and most of them are still there. So, EDF and others lobbied very hard to get them off, but really didn't make much progress.

The new Administration is much more receptive to this effort. Not only does removing these regulations fit their philosophical approach, it would also allow the agency to impose other regulations under the Two-for-One EO. Because removing something like a gear restriction is not a routine fishery regulation, that does count toward Two-for-One. Moreover, our analysis indicates that removing certain outdated regulations could result in increased revenues of $40 million per year to the fleet, translating into roughly 400 new coastal jobs. This kind of improved economic result would make the program, which has shown so many conservation benefits, more durable and likely to persist into the future.

Now, unfortunately, another tenet of this Administration—which is favoring resource use over conservation—has played out in a less benign way in the Gulf of Mexico in respects to the red snapper. First, we have to remember that, in fisheries, favoring resource use doesn't really tell you which resource user you're favoring. The classic divide between resource users and environmentalists does exist in fisheries, but the divide between recreational and commercial fishermen can be just as great. This is particularly true in the Gulf of Mexico, where the reef fish fishery in the commercial sector operates under a catch share program similar to the one in the Pacific; whereas the recreational sector is using a traditional system of bag, size, and season limits that anglers are very unhappy with primarily because of reduced federal fishing seasons.

So, as red snapper began to recover, it became much easier for recreational fishermen to find and catch these fish. What happened was that as the federal managers lowered the number of days, first for the purpose of rebuilding the fish and then because the fishermen were catching quotas so quickly, where state fishing seasons previously used to mirror the federal regulations, they started to divert materially and be much longer than the federal seasons. That then created a vicious cycle where the federal managers had to take into account the mortality, and state waters set the fishing season. The federal waters has it lower and lower to the point where in 2017, the first year of the new Administration, there was only a three-day federal fishing season.

So, that summer, recreational anglers reached out to the Administration to lengthen the fishing season beyond what the science suggested. They did reach an agreement with the states to give up some days of fishing, but not nearly enough to make up for the additional federal days. When they announced the new season in mid-June, they stated in the pages of the *Federal Register* that "the approach will necessarily mean that the private recreational sector will substantially exceed its annual catch limit"[21]—which is not allowed under the Magnuson-Stevens Act.

So, Ocean Conservancy and EDF took the unusual step, at least for our oceans program, of suing the federal government over this decision.[22] Even more unusual, the U.S. Department of Justice declined to defend the merits of the case. They basically said that the case was moot, and that it should be remanded if it wasn't moot. Because Judge Amy Berman Jackson seemed receptive—unduly so in our view given the state of law—to the mootness argument, and in light of the fact that the new NMFS Director Chris Oliver filed a declaration stating the agency would not repeat the action,[23] we agreed with the government to stay the case through the end of 2018 in exchange for a quick return to Judge Jackson's courtroom if there is any future action of that nature.

Pivoting to the legislative side, the impact of the new Administration on fisheries legislation has been somewhat surprising. For years, reauthorization of the Magnuson-Stevens Act has been held up because of inability to bridge the differences between the various user groups, as well as with environmentalists. With a Republican president, fishing interests became more incentivized to get a bill passed through the U.S. Senate, which required working more carefully with the commercial fishermen and between recreational and commercial fishermen, and also with environmentalists who usually have enough power in the Senate to stop something like that from happening.

I'll give you an example of how that's played out. Last session, Rep. Garret Graves (R-La.) introduced a bill that would have transferred the entire Gulf red snapper fishery to a new management body made up of state fish and wildlife managers.[24] This bill was unequivocally opposed by commercial fishermen and was, therefore, essentially a nonstarter. This year, Representative Graves and Sen. Bill Cassidy (R-La.) have introduced companion bills in the U.S. House of Representatives and Senate that would give the states the authority to set seasons for parts of the federal waters as well as state waters, but only over the private angler piece of the fishery.[25] They've also stressed that they

21. Fisheries of the Caribbean, Gulf of Mexico, and South Atlantic; Reef Fish Fishery of the Gulf of Mexico; Revised 2017 Recreational Fishing Season for Red Snapper Private Angling Component in the Gulf of Mexico, 82 Fed. Reg. 27777, 27779 (June 19, 2017).
22. *See* Complaint for Declaratory and Injunctive Relief, Ocean Conservancy and Environmental Defense Fund v. Ross, No. 1:17-cv-01408, Dkt. #1 (D.D.C. July 17, 2017).
23. *See* Declaration of Chris Oliver, Ocean Conservancy and Environmental Defense Fund v. Ross, No. 1:17-cv-01408, Dkt. #25-1 (D.D.C. Oct. 13, 2017) at ¶ 6 ("the reopening of the private angler season in 2017 was a one-time action . . . NOAA does not intend to reopen the private angler season in the same manner in 2018"); *see also* Order, Ocean Conservancy and Environmental Defense Fund v. Ross, No. 1:17-cv-01408, Dkt. #39 (D.D.C. Dec. 20, 2017) (holding case in abeyance pending 2018 management measures; noting NOAA's acknowledgment that the "re-opening of the private angler fishing season for Gulf of Mexico red snapper in 2017 was a one-time action that the federal defendants have not elected to defend on the merits in the briefing filed in this case to date").
24. H.R. 3064, 114th Congress (2015-2016).
25. H.R. 3588 and S. 1686, 115th Congress (2017-2018).

want NOAA to be able to continue to set the catch limits on that fishery.

These changes reflect concerns expressed about the previous bill by commercial fishermen and others, and the sponsors have been engaging with other stakeholders to a much greater extent than they did last Congress. In its current form, the bill lacks adequate conservation safeguards and it may well be that no deal could be reached, but there has definitely been a change in approach. I will add that the same bipartisan attempts to reach agreement have been shown in the Senate, as well as even in the House, where things tend to be much more partisan in the Natural Resources Committee. Rep. Don Young (R-Alaska) made an effort to work with Rep. Jared Huffman (D-Cal.) as his counterpart to find a bipartisan solution in the House. Ultimately, the Magnuson-Stevens Act reauthorization bill that passed the House[26] was very partisan and is unsupported by Democrats, but there was an effort made.

Lastly, we have not seen an Administration bill. That may be because of the newness of the oceans team at the U.S. Department of Commerce, or perhaps the fact that, again, the user groups are not necessarily on the same page about what they want any reauthorization to look like. So, any bill that the Administration put forward might well be opposed by one or another of the user groups.

Xiao Recio-Blanco: Thank you, Monica. The first question I have here is for Shana. It's actually two questions: Does ICCAT consider 1950 landings in determining virgin population in order to set more protective or precautionary total allowable catch? In relation to that, does NMFS consider 1950 biomass in determining virgin population intact?

Shana Miller: Yes. So, it's really the same answer to both questions. It is assumed for the western stock of Atlantic bluefin tuna, not for the eastern stock, that the 1950s level is approximately virgin biomass.

Xiao Recio-Blanco: I have another question for Mike: which NMFS regions are best or worst at habitat protection?

Mike Gravitz: This actually is something that ought to be studied by somebody in a comprehensive, objective way. But I will give you my opinion, and that is the Mid-Atlantic and the South Atlantic are doing the best jobs of all of the regional fishery management councils working to protect habitat. The Gulf is probably doing the next-best job, and then the North Pacific and Pacific councils are not that interested in habitat protection for reasons that have to do with being tilted toward fisheries.

That leaves out New England, which has traditionally been the least interested in habitat protection but which, after 14 years, is about to approve an historic habitat amendment.[27] I am not very knowledgeable about the intricacies of the situation, but it appears New England will be treating habitat in better ways than it has for the past 14 years.

Monica Goldberg: This may be related to your point, Mike, about Pacific looking at habitat through a fisheries lens. But I will add that one of the restrictions on groundfishing has been these large areas called rockfish conservation areas, which were set up, originally, primarily to reduce fishing mortality. So, there's been a collaborative organizational effort by EDF, the Natural Resources Defense Council, and several fishing groups to identify those areas in the rockfish conservation areas that have special habitat values to continue to close them while allowing folks to trawl in the areas that are less impacted by that activity.

Mike Gravitz: Right. And the rockfish conservation areas have performed well, I think. They're quite large compared to the total fishable area in the Pacific. I gather there is a movement to try to turn some of them into more permanently closed areas, but it is a very expensive process for NGOs to engage in.

Monica Goldberg: They're very intensive.

Mike Gravitz: And in some ways puts, I think, a difficult burden—I won't call it unfair burden—on fishermen and environmental NGOs to really fully participate in a good way.

Xiao Recio-Blanco: We have another question: do the regulations for the Pacific groundfish trawl fishery protect habitats?

Monica Goldberg: We do focus on the fishery management part more so than the habitat, but I can answer to an extent, which is that, as Mike adverted to, there were relatively large rockfish closed areas that were defined by the depth of the water. Those were originally set up to reduce fishing mortality on overfished rockfish species. So, it was a fishery-oriented thing that ended up protecting habitat, if you will.

Now that the fishery is operating under an IFQ, number one, if they go into any of those habitat areas that house a lot of these overfished species, they will hit their quotas on overfished species way too quickly and not be able to continue fishing for other stocks. So, there's a built-in reason to stay away from habitat that happens to house a lot of these fish, and a lot of that is the coral habitat that's very textured and delicate, and things like that.

In effect, what they have done is set up processes where they tell each other where they're encountering these species and warn each other to stay away from them so they

26. H.R. 200, 115th Congress (2017-2018).

27. Press Release, New England Fishery Management Council, NMFS Approves "Majority" of Council's Habitat Amendment (Jan. 8, 2018), *available at* http://s3.amazonaws.com/nefmc.org/NMFS-Approves-%E2%80%9CMajority%E2%80%9D-of-Council%E2%80%99s-Habitat-Amendment.pdf.

don't hit their quotas. The indirect impact of that is often to protect significant habitat. Then, in an effort to open up some of the closed areas that can tolerate it, they've really gone through this process of identifying those parts of the rockfish closed areas that do encompass important habitat and keep those closed while reopening areas that can tolerate it so that the fishermen can catch more of their quota. As I said, there is a lot of unutilized quota there.

So, it's kind of hand-in-glove. To the extent that that can provide effective coverage for some kinds of habitat, I think that's helpful. It doesn't do a comprehensive job of looking at the values of areas for habitat purposes across the board. It's just focused on those particular areas.

Mike Gravitz: In the Pacific council, I'd say the process is supposed to occur every five years. I think we're on the fifth or sixth year of this cycle. And there are lots of places in the federal ocean off the West Coast that, while they may not have a lot of fishing going on, have wonderful habitat for certain things. I think because of the focus on fisheries, those places tend to get downplayed and ignored. So, I think that is a problem.

Xiao Recio-Blanco: Thank you. The last question asks, wouldn't the NMFS function of protecting certain species such as turtles, whales, and so on be better served in some other agency? For example, one not focused on harvesting targeted wild fisheries.

Mike Gravitz: The Magnuson-Stevens Act is in some ways a conflicted statute, right? Because it is mostly about resource extraction, fisheries, and it does have some statutory language about marine mammal conservation and habitat conservation. The job of protecting warm-blooded marine mammals in the ocean primarily falls under NMFS, which is an odd place to put it if you think about it objectively. So, that is an interesting question. People have thought about trying to move some of these things around, but I don't think there's been a really serious attempt to do it.

Monica Goldberg: Maybe you'd be trading off. If you think about where else it would go, the only other place it would really go would be the U.S. Department of the Interior (DOI). While they do have a lot of experience with managing endangered species and so forth, there isn't the kind of ocean expertise and the marine conservation expertise that you have at NOAA. So, I think every dividing line has its pros and cons. When you put agencies in an antagonistic position, sometimes that is helpful to the species that one agency considered it its job to protect. But on the other hand, there is also some value to having that interconnectedness of the marine science piece within NOAA.

Shana Miller: Just to add, DOI already has ultimate jurisdiction over the ESA, which many of these species are listed on, as well as bodies that regulate their international trade. As NMFS goes, the Protected Resources Division is much more conservation-oriented. So, that helps, too.

Mike Gravitz: Oh, absolutely.

Xiao Recio-Blanco: I think we're going to have to stop here Thanks again to our three panelists for their participation and for their time today, and to all of you in the audience for your interest.