

2021 NOAA FISHERIES RECREATIONAL ROUNDTABLE MEETING SUMMARIES



**NOAA
FISHERIES**

Greater Atlantic Region Recreational Fisheries Roundtables

May 12, 19, and 26, 2021

The three GARFO Recreational fishing roundtables (May 12, 19, & 26) covered a wide variety of topics, however there was general overlap on key areas of interest. These topics broadly include: Data Collection/Marine Recreational Information Program (MRIP); Ocean Spaces Uses; Equity Issues; and Recreational Management Reform.

Data Collection

Concerns over multiple facets of data collection occupied a substantial amount of time at two of the roundtables. Fishing industry advocates, charter captains, and a state fisheries official all voiced frustration that MRIP data was being used at spatial scales and timescales that were not appropriate for the survey's design. The prevalence of fishing from private docks and discrepancies in the data were used to validate low public confidence in the data. Unpredictable seasons arising from statistical error and high annual variation of catch estimates were mentioned as a key source of frustration for businesses and state managers.

Management Reform and Equity

Recreational management reform was mentioned in tandem with interest in changing data collection and use. A charter operator mentioned that they would like to see amendments to harvest control rules brought before the councils. Better management methods for multispecies complexes were also mentioned.

Related to the Mid-Atlantic Fishery Management Council's recreational reform initiative, a discussion on providing equitable access to the fishery was had. Fishermen noted that as measures are adjusted in the management process, they believe there is increasing inequity for shore-based and non-commercial fisheries (i.e., fishing that provides a food source, but is not revenue-generating). Increases in minimum sizes and reductions in seasons limit access to a healthy food source for traditionally underserved populations.

Ocean Space Uses

Concern over competing Ocean Space Uses in the form of wind power (and to some extent aquaculture, 30x30) was broadly voiced. Members from all the represented sectors (for-hire, private anglers, fishing industry advocates, state managers) pointed out that there was little to no information on the impacts of wind turbine installation, operation, and maintenance on fish species. Concerns over fish abundance, migration, and behavior in response to potential installation, acoustic, and electromagnetic impacts on marine species were highlighted. The roundtable members also mentioned a poor relationship with the Bureau of Ocean Energy Management and their concern that a disaster (mechanical accident, terrorism, etc) could result in all access near the wind farms being revoked.

Additional topics included Recreational economics, sand mining, depredation and concerns over specific species (Striped bass / fluke / haddock / black sea bass / Scup).

Atlantic Highly Migratory Species Recreational Fisheries Roundtable May 28, 2021

The HMS Recreational fishing roundtable occurred on Friday, June 28th, following the spring HMS advisory panel meeting (June 25-27). Major Issues discussed included recreational data surveys, particularly the Large Pelagic Survey (LPS) and MRIP; wind power development; and 30x30. Participants included representation from the for-hire industry, private anglers, and fishing industry advocates.

Data Collection and Sharing

Data collection and sharing were key discussion points for the recreational HMS anglers. The importance of a “one-stop shop” method for catch reporting was emphasized to keep reporting burdens low for fishermen. Fishermen also expressed concern that bluefin tuna managed under ICCAT are not being sufficiently reported. The use of pictures on social media and the heads/carcasses of HMS for data collection were proposed as additional tools to better understand the fishery. Members of the charter sector expressed doubt that sharing additional information with federal agencies would improve their fishing experience and/or capabilities, and may even reduce access.

Offshore Development and Conservation

Members of the discussion expressed substantial concern over the level of organization and coordination they would need to adequately address windpower development. They pointed out the level of effort that was required to provide inputs for national sanctuary formation and indicated that doing something similar for each new wind power development might not be possible. For-hire fishermen described bringing captains together with logbooks to highlight fishing grounds on charts. Fishermen are content with NOAA Fisheries engagement but expressed that they have a poor relationship and level of communication with the Bureau of Ocean Energy Management. Charter fishermen indicated that there will be massive safety challenges while fishing for pelagics near wind farms that could “zone out” HMS fishermen in these areas. There is general support for additional research and the need to establish baseline estimates in all areas where wind power will be developed.

The discussion participants also expressed interest in learning more about how 30x30 will impact access to, and conservation of, pelagic species.

Marine Fisheries Advisory Committee Recreational Fishing Roundtable May 27th, 2021

MAFAC committee members provided input and agenda topic suggestions for the 2022 Recreational fishing summit at the May 2021 meeting. Members brought up a wide range of topics and expressed interest in follow up communications, so the community knows their ideas were heard. Topics can be broadly placed in 5 categories: Data, fisheries management, socio-economics, climate change, and emerging ocean uses.

Data and Management Reform

During the session, committee members emphasized the long term challenges that recreational fisheries have had with data and which are contributing to angler dissatisfaction. Some participants stressed the need to discuss building trust and angler buy-in to with regard to federal data. Electronic reporting, citizen science and promoting engagement with NOAA's Fishing Effort Survey were all brought up as solutions or steps to improving data challenges. There was limited debate as to whether there would be enough progress made on electronic reporting by the Recreational Electronic Reporting Task Force for it to be a viable summit topic.

In tandem with data, recreational fisheries management reform and flexibility was another issue identified by MAFAC members. Specifically, management flexibility and guidance on Annual Catch Limits were identified as specific policy elements members wished to discuss at the summit.

Economics and Angler Development

Some participants expressed interest in Summit discussions pertaining to recreational fishing economics. Later in the meeting, other members expressed interest in discussing a marketing and promotional program for recreational fisheries, similar in nature to NMFS's ongoing seafood marketing efforts. Angler engagement and development, including with children, were also mentioned as potential elements of a recreational fishing promotion.

Angler engagement and trust building from multiple perspectives -- data, research, decision making -- was noted as a crosscutting issue that should be included as a Summit agenda topic. A suggestion was made to discuss development of a trust building process during the summit as well as identifying ways to reinvigorate flagging participation in the fishery management process .

Interest in expanding consideration of subsistence fisheries, and representation thereof, at fishery management councils was also suggested. Another member identified equity and inclusion in both fisheries and the fishery management process as potential topics. This topic was linked to the Biden Administration's interest in better addressing environmental justice.

Climate Change and Ocean Space Uses

Both climate change and emerging uses of ocean space(wind power, aquaculture), as they relate to recreational fisheries, were mentioned as important topics that should be addressed at

the summit. Impacts of shifting stocks (biological and management), adjusting management to address challenges associated with climate driven changes, preparation of coastal communities for climate change, defining “climate resilient recreational fisheries” and addressing fishery allocation in light of climate change were among the specific issues identified. One participant suggested that NOAA should aid in developing business plans related to recreational fisheries, strategies to catch new species, and redefining the recreational fishing experience under climate change.

Pacific Islands Non-Commercial and Recreational Fisheries Roundtable

June 9, 2021

The Pacific Islands' non-commercial and recreational fisheries roundtable discussion was hosted by the Western Pacific Fishery Management Council's Non-Commercial Fisheries Advisory Committee (NCFAC), which was open to the public. NOAA staff spoke to the roundtable and 2022 Recreational Fisheries Summit portions of the Advisory Panel's agenda. Attendance fluctuated between 21 and 56 participants.

NOAA Update

NOAA staff provided an overview of recent national and regional activities, including emerging high-level Administration priorities, NOAA's Recreational Fisheries Initiative, the Pacific Islands Regional Office's (PIRO) sustainable recreational and non-commercial fisheries grant program, Marine Recreational Information Program work, and a regional project to characterize non-commercial fishery participants in the main Hawaiian Islands.

Participants stressed the importance of considering "island culture" when advancing the Administration's interests in improving environmental equity and justice. Specifically, participants stated that fishing equates to food in the Islands, whereas in many areas of the continental US, fishing equates to recreation.

Wind Energy Development

Participants expressed interest in, and some level of concern about wind energy development. They were interested in the experiences and concerned by the challenges of recreational fishermen in the Northeastern US when engaging on ocean energy issues. The ability to engage in dialogue with federal agencies and developers during the planning phase, the ability/inability to provide spatial data identifying non-commercial and recreational fishing grounds, effect on seabirds, and disruption to migratory patterns of pelagic species were specifically mentioned. With regard to the latter, the turbines' effect acting as fish aggregating devices was noted. An action item from the meeting was to request spatial fishing information from the State non-commercial monitoring program (Hawaii Marine Recreational Fishery Survey, HMRFS) to support future engagement in ocean energy discussions, and if that information was lacking from the survey to develop a plan to gather it.

Council Engagement

Participants noted that engagement with the fishery management council is waning. They expressed an interest in a discussion during the 2022 recreational fisheries summit regarding increasing engagement and participation and capacity building. It was noted that, given the generally independent nature of non-commercial and recreational anglers, participation and representation of these interests is decreasing with limited prospects for additional recruitment. Specific interest in developing a plan to recruit and build representational capacity of these sectors was suggested.

South East Region Recreational Fisheries Roundtables May 10th and 12th, 2021

The Southeast Region Roundtables consisted of two separate meetings for constituents representing the areas managed by the Gulf of Mexico I and the South Atlantic Fishery Management Councils. Concepts and topics brought up during the Roundtables can be broadly characterized into 6 categories: Research/data, Business/Development, Management, Ocean uses, climate, and species specific concerns.

Research

Participants indicated that they were happy with the scientific results of the Gulf Great Red Snapper Count, although it had not yet completely yielded the management changes desired. Participants indicated interest in doing additional, similar projects in collaboration with recreational fishermen and businesses, in particular for red snapper in the South Atlantic. A major data gap mentioned at both meetings was defining the universe of anglers to better understand their needs and impacts.

Growth and Impacts of Recreational Fishing

Broadly, the surging popularity of recreational fishing in the southeast region and the need for continued community and business development drew considerable interest at the Roundtables. Businesses and charters indicated that they had received record sales during the pandemic and expressed optimism that business would stay strong. Despite optimism over good-business, multiple business owners and fishermen indicated that the new wave of fishing was having negative impacts on fish stocks and the environment. Due to this, participants communicated a general need for more outreach and education efforts to inform new fishermen on best practices and impact awareness. Specifically, education efforts when fishermen buy licenses, partnerships with Non Government entities, and the use of social media / influencers were all cited as potential solutions to educate new anglers on sustainable fishing.

NGO members also raised concerns on whether or not Federal and state management would be able to keep up with a dynamic recreational fishing population. They emphasized the importance of habitat/nursery area protection and stable access as key angler priorities. Members also addressed allocation and a dislike for the transfer of unused quota to the commercial industry because it removes incentives for a conservation ethic.

Ocean Space and Climate

Members expressed concern over the increased emphasis and siting of wind power and aquaculture and expressed the importance of avoiding placing these instalments in critical habitat areas. Climate concerns were brought up in a low level of detail with the exception of the need to define “climate resiliency” for the recreational industry.

South East Region Recreational Fisheries Roundtables September 16, 2021 - 6:00PM to 7:35PM (est)

The September Southeast Region Roundtable consisted of a virtual meeting for constituents representing the areas managed by the Gulf of Mexico. Concepts and topics brought up during the Roundtables can be broadly characterized into 4 key categories: Water Quality/Red Tide, Charter Operations, In-season closures (Red grouper), and Agency Outreach.

Water Quality/Red Tide

A common concern across all participants was the recent water quality issues, particularly within the Gulf region, ranging from Florida to Texas. While each region was different with their experiences, the overall commonality had to do with hypoxic zones in the northern Gulf that are affecting many of the species that recreational anglers and charter boats fish for (Kingfish, Cobia, other pelagics, etc). With regard to Red Tide, it was noted that the impacts of its presence have become longer in season and more harmful to fish habitats, and fishermen worried that the species mortality caused by the natural occurrence are having an impact on their catch limits, fishing season length, and livelihood. While acknowledging this isn't NOAA's fault of occurrence, it's becoming a larger factor in the recreational/charter fishing operations and they have concerns what the ripple effect will be in coming years.

Charter Operations

Multiple constituents expressed a large concern with the influx of illegal charter boats taking to the sea. They expressed frustration with following regulations being ignored by others and the competitive business disadvantage of being a legitimate charter operator. The primary issue noted is that these vessels are either not-federally permitted charter boats, or that they are retaining species that they are not charter permitted to target/retain (ex: VSL is permitted as a Reef Fish charter, but keeping CMP species). Participants noted monetary damages the illegal charters do to businesses, the need for more visible identification of legit charter vessels, interest in better presence/enforcement from the USCG and NOAA OLE, and a public facing campaign that raises awareness of how to identify legitimate charter operations vs illegal ones. In addition participants commented that these vessels are not inspected for proper charter safety regulations and could become an issue of "safety of life at sea" in a hazardous situation.

Charter captains also expressed concern with the constant regulatory changes to their operations & vessels. First it was logbooks, then VMS/SEFHIRE, and then constant closures that limit their business. The money out (required add ons) vs money in (red grouper and gray triggerfish closed) has them worried. Some participants noted it is difficult to operate when many species of interest are closed concurrently. There was also a discussion of the growing number of private recreational anglers relative to the number of charter boats in recent years. This led to the charter community starting to inquire about breaking up popular species ACL's into a 3-Sector allocation (Commercial, Recreational, Charter).

In-Season Closures

A substantial discussion revolved around the in-season closure of red grouper. As charter operators, they plan out their calendar year around fishing seasons, and that's when they offer bookings, which fill up quickly. However, when they plan this out and then a highly popular species is closed, especially on short notice during the planned season, it has a fiscal impact on their business and often results in customers cancelling their reservations. These closures lead to more questions about NOAA and the Council process, decreased trust in the reporting and science, and more skepticism about regulations. Participants also commented about the seeming disconnect between some stock assessments and what some fishermen see on the water and how damaging this scenario is to NOAA / Council credibility. This concept was repeated several times throughout the meeting.

Agency Outreach

During the meeting, several fishermen expressed the need for better community outreach coming from NOAA & the Councils and more advanced notice of future in-season closures. In recent years, they feel there is a growing disconnect between them and the regulators. They say they attend these council meetings, ask questions, solicit input, then have productive discussions. However, when the rules come out, it's completely different and more restrictive than the conversation that was had in person. Another aspect of outreach they would like to see is more effort from NOAA Fisheries & OLE to highlight the importance of hiring only legal charters and more press releases/stories about illegal charter violations identified by state, USCG, and NOAA OLE. They all believe that this will help spread awareness of the current issues and lead to a deterrence measure for people running illegal charters. Ideas ranged from NOAA launching a series of web stories/videos/brochures to greater law enforcement presence on the water to working alongside fishing publications to expand awareness.

Additional topics discussed/concerns expressed:

- Growing amount of discard mortality associated with Menhaden & taking the bait fish out of an ecosystem has a big impact.
- Appreciation for NOAA's outreach with the DESCEND Act & giving out devices to the communities.
- Inshore habitat conservation in the wake of growing industrial operations eroding the marsh.
- Increase in red snapper IUU fishing from Mexico and associated concerns.
- The need for red grouper IFQ reform. Commercial boats have stated they are not using all their quota, which is going unused, but the season is closed for all rec/charter boats.
- Concerns about the SEFHIER rollout, mandate, requirements, and what to do if the system goes down.
- Better cooperation from the charter community about aiding MRIP & future data collection.
- Implementation of a line of demarcation with VMS tracking to solve reporting issues/requirements and involve more vessels.
- Appreciation and value of the Marine Resource Education Program and how more fishermen should participate in this program.

West Coast Region and Northwest/Southwest Fisheries Science Center Recreational Fisheries Roundtables

NOAA Fisheries' West Coast Region and the Northwest and Southwest Fisheries Science Centers hosted two recreational fisheries roundtables focused on maintaining our contacts with the recreational fishing community and refreshing our understanding of key areas of interest, priorities, and/or concerns. The roundtables were held on June 16, 2021, with one focused on the Pacific Northwest and the other on California. Major topics of discussion revolved around continued access and opportunities for recreational fishing.

Public Engagement:

Anglers expressed interest in being more involved in both data collection and habitat restoration efforts. It was expressed that NOAA Fisheries could do more to promote existing partnerships with angler organizations that collect fisheries data to build trust and collaboration with fisheries scientists and managers. Participants highlighted the progress on past topics of discussion, including those at the 2018 National Recreational Fisheries Summit, and felt continued engagement would increase trust by, and collaboration with, the angling community. Participants also requested scientific and economic informational updates on our West Coast fisheries, such information on NOAA Fisheries' national webpages, with links to the Regional and Center webpages to provide for easier navigation. Participants also noted that holding meetings virtually has provided more opportunities for anglers to be involved in discussions over the past year, and encourage continuation of remote access for participants to engage in federal processes.

Data:

Participants noted that timeliness and availability of data, including biological data of harvested fish, was potentially limiting angler opportunity. Participants noted that data collection via smartphones or other electric means could cater to a younger generation of anglers and provide more and timely data than existing sampling methods. Participants also noted that additional sources of data would support stock assessment accuracy.

Participants expressed support for additional salmon smolt tagging and in-river sonar devices for in-river monitoring. Participants also noted the need for bar crossing and weather data to increase safety of boaters.

Participants also noted a lack of effective deterrence methods for pinnipeds.

Opportunity:

Participants expressed their support for continued access to fishing opportunities. Competing ocean uses (e.g., wind farms, aquaculture, and to an extent, President Biden's [Executive Order](#) on the climate crisis, known as "30 by 30") were of concern, and participants voiced support for continued access to these ocean areas. Participants also noted that time on the water, access

to fishing grounds, and production of, and access to, hatchery fish were critical to continued fishing opportunities.

Participants noted that maintaining or increasing flexibility in management is needed to respond to any potential negative impacts due to changing climate conditions and stock conditions, and that industry could support data collection efforts to get us to “climate-ready” fisheries.

Regulatory:

Participants communicated the importance of timeliness and flexibility in changing regulations, while noting that regulatory changes can be slow. For groundfish, in particular, participants discussed the success of Rockfish Conservation Areas in rebuilding stocks and the need for expanding access to these closed areas. Participants also discussed the need to better prioritize and plan for stock assessments, including identifying priority species for data collection. It was noted that a regular schedule of assessing stocks may minimize disruptions to fishing plans, including operations of Commercial Passenger Fishing Vessels (CPFVs). It was also noted that state-level regulations related to engine emission standards may severely impact the CPFV fleet and access to charter fishing opportunities. Participants noted that cross-agency coordination is essential for productive fisheries.

Funding:

Participants expressed concern over sufficient funding for hatchery production at aging facilities. Participants also highlighted insufficient funding for law enforcement staff, as well as for the science and management of recreationally-important groundfish stocks (i.e., staff support for stock assessments and management measures implementation), though it was noted that NOAA Fisheries has made great strides in stock assessment capacity. The efforts by the recreational fishing community to collaborate with NOAA Fisheries and state agencies to collect data for use in management were highlighted as positive angler contributions to ensuring sustainable fisheries.

Salmon:

Participants expressed concerns with various impacts to salmon populations coast wide, and communicated a need to address these issues to retain viable salmon fisheries. Participants also noted that in-stream water flows and in-river management in California, a commitment by NMFS to reinitiate the Central Valley Project and State Water Project Biological Opinion, and the funding and operation of hatcheries West Coast Region wide, were critical to continued fishing opportunities. Several participants requested NOAA Fisheries act proactively to advance conservation hatchery practices in California’s Central Valley to rebuild the declining natural-origin populations listed under the federal Endangered Species Act (ESA).

Participants also expressed concerns of habitat degradation, and a willingness to participate in habitat restoration projects that would benefit salmon as well as other species like ESA-listed groundfish stocks in Puget Sound. Participants were further concerned with continued predation of salmonids by marine mammals and birds, in addition to the lack of effective deterrence methods, as noted above.

Alaska Constituent Discussions re: National Saltwater Recreational Fisheries Summit Discussion Topics

Fisheries Promotion

There was interest in NOAA Fisheries supporting promotional efforts for recreational fisheries in Alaska, the for-hire component in particular, as it does for the seafood sector. Covid negatively affected for-hire interests and promotional assistance to offset lost business is desired.

Climate change

This was a concern from a number of perspectives, including: shifting stocks, including the movement of halibut stocks to Russian waters where there is no US access and little data, habitat impacts, rising ocean temps and sea levels, reproduction, impacts on crustacean populations and salmon (migration timing). Discussants suggested that a management strategy evaluation on climate change may be in order.

Adaptive management

Topic was highlighted by discussants. In particular, the ability to quickly adjust to changing conditions from any cause is needed. Discussants note climate change, COVID, changes in stock abundance, new data, or other circumstances can create the need to quickly adjust management to new and changing circumstances. The current management structure was seen as cumbersome.

Fishery catch and effort data

Issues were not seen as particularly problematic. The State of Alaska is viewed as doing a good job collecting relevant catch / effort data in the for-hire fishery via logbooks and for the private sector via port sampling. Discussants suggested that data compatibility could and should be improved to allow for wider uses of the data within and between management agencies. Electronic reporting in the for-hire fishery (run by Alaska Dept. of Fish and Game) was seen as largely successful.

Economic data

Data on Alaskan recreational fisheries are seen as insufficient and inadequate. Efforts by the International Pacific Halibut Commission to value commercial and recreational fisheries were of limited utility. Data issues were not recommended for discussion at the 2022 summit because of their complexity and the unique nature of data collection programs in each area of the country.

Council participation

Concerns with it and the number of young entrants in the for-hire fishery were identified as long-term concerns. Discussants noted a limited number of younger entrants in the for-hire fishery along with limited interest in participating in the Council process. Discussants noted the threat this poses to the viability of the fishery as well as to informed decision making on issues affecting recreational (for-hire) fisheries. It was suggested that a council training / education program could result in more effective council engagement by the fishing public and council members. The idea of a having potential council members shadow existing council member was suggested.

Fishing effort and efficiency

Discussed as general concern for the future of recreational fisheries. It was expressed that there are too many people chasing too few fish while technology is making anglers more efficient. It was stated that fisheries could be managed by limiting access or limiting harvest. Participants suggested that fishermen and managers will need to identify what kind of fishery is ultimately wanted: quantity -- a fishery where many or all have the chance to fish under more stringent conditions possibly leading to a less satisfying experience or, quality -- a fishery with a smaller number of participants having a more rewarding experience. It was stated that the ability to fish for an entire season is critically important to the success of for-hire businesses. With regard to efficiency, it was felt that it will not be possible / feasible to limit application of most new technologies (electronics, vessel improvements) but that managers could consider gear modifications (single hooks, hook size etc.) to address efficiency gains from technology.

Emerging/expanding ocean uses

Matter is of limited concern. Wind energy and aquaculture concerns in other parts of the U.S. were not seen as an issue. However, increased whale watching was viewed as an increasing problem. Fishermen noted that multiple (6-7) whale watching boats will crowd a single whale and prevent or interfere with for-hire fishing operations.

Diversity and Inclusion

These were not considered problems in AK fisheries given participation of native Alaskans in various segments of the fishery. It was noted that given the limited access nature of Alaskan for-hire fisheries, the largest barrier to entry was capital regardless of race, ethnicity, or gender.

Allocation reviews

These were noted as a concern for the for-hire halibut fishery because they were viewed being a rubber-stamp for the *status quo*. Participants felt that allocations were not given adequate attention, in part because of the power disparity between the commercial and recreational fishing interests at council table.

Habitat conservation and restoration

This was viewed as important for many fisheries for many reasons. Discussants noted the importance of healthy habitats for climate resilience and mitigation.

Release mortality

This was discussed as an issue for which more can always be done, including angler education regarding best handling and release practices.

Caribbean Regional Recreational Fisheries Feedback
October 12th (*via email correspondence*)

SERO Recreational Coordinators reached out to constituents to solicit inputs on issues and concerns to recreational fishermen in the Caribbean region. Responses centered around intra-sector issues, data concerns, enforcement and permitting, and some miscellaneous questions/issues for future discussions.

Sector Identification/Separation/Balance

There was interest and concern regarding the most appropriate classification for fishing charters. Concerns were whether the charter industry should be identified as a commercial or recreational activity. Some believe charters are professionals that perform fishing activities with recreational methods of fishing. However, in the region, there is a growing trend of recreational fishing morphing into commercial activities, which leads to concern of how that will affect the fishery resource.

Data Methods/Research/Gears

Constituents inquired about a need to allocate more species to the recreational sector with some species being allocated solely to the commercial sector. They also expressed concern as to why the recreational sector is not given the same value as the commercial sector with regard to obtaining data, even though its economic impact and participation is far greater in the region. They feel there is a regional need to establish different data collection opportunities between charter and recreational fishing activities as well as a need to compare and contrast the commercial and recreational fisheries if the data obtained are consistently different.

Fishermen also mentioned that in Puerto Rico, there has not been a single scientific study since the 1950's that has not concluded there is a problem with overfishing. They noted that a recent reef fish stock assessment showed that many species are being harvested at multiples of their sustainable rate, and other species could not even be sampled in large enough numbers to determine their status and they've effectively dropped out of the data. They stated that this appears to be mostly due to commercial fishers targeting spawning aggregation sites to the point of extinction. The most overfished species are the ones that aggregate to spawn. They also noted that massive use of fish traps in the past, gillnets, beach seines, trammel nets are still all in use.

There was also discussion of the need to address the spearfishing fishery. They estimate roughly 7,000 or so recreational spearfishers in Puerto Rico. In addition, they note that there are no studies specifically on their (spearfishers) activity, though MRFSS collected 18 years of spearfishing catch and effort.

Enforcement & Permitting

It was noted that effective fisheries management is impossible without effective enforcement. They expressed a dire need for fisheries management agencies to increase fisheries enforcement in efforts to protect the region.

Another issue of concern the participants addressed is that recreational fishing licenses are not even “on the radar” of the Puerto Rico DNER. They asked how NOAA can help to raise “official” awareness of the convenience of implementing them for the region.

Questions/Issues for Future Discussions

Participants offered up a few questions/issues that they felt were collective of others in the region. These included:

1. How is the fishing tournament industry in PR different from that in the mainland?
2. The swordfish fishery is active in PR. How is the population doing?
3. What can be done to assure that Fisheries Advisory Boards have adequate representation by the recreational sector? Every such group in Puerto Rico is overwhelmed by the minority commercial sector.
4. Will technology and social media open fishing opportunities and boost the industry, or hurt the resource and the ethics among recreational fishing?