

Atlantic States Marine Fisheries Commission

Guidelines for Resource Managers on the Enforceability of Fishery Management Measures

Developed by ASMFC's Law Enforcement Committee

Sixth Edition
2024



Vision: Sustainable and Cooperative Management of Atlantic Coastal Fisheries

INTRODUCTION

The Law Enforcement Committee (LEC) of the Atlantic States Marine Fisheries Commission (ASMFC) first prepared the *Guidelines for Resource Managers on the Enforceability of Fishery Management Measures (Guidelines)* in 2000. In keeping with ASMFC direction to periodically review and update the guidelines, the LEC revised this document in 2002, 2007, 2009, 2015, and now this sixth edition, effective July 1, 2024. The core of the new *Guidelines* is an enforceability matrix for fishery management measures. The matrix table was developed from the responses to a survey of LEC members. The enforceability ratings cover a variety of management strategies that are employed in marine fisheries management programs. We include ratings for these strategies based on overall, dockside, at-sea, and airborne enforceability. The LEC strongly encourages managers to consider the enforceability of all management regulations that are developed. We believe the *Guidelines* can support and strengthen the effectiveness of the Commissions efforts to conserve our marine fisheries resources.

Compliance with natural resource regulations helps ensure sustainable fisheries. Many factors contribute toward compliance, including but not limited to the perceived legitimacy of the regulations/process, moral norms, voluntary compliance, enforcement, and enforceability.

Acknowledgements

The LEC gratefully acknowledges our current and past members who contributed time and expertise to the *Guidelines*. We thank NOAA Fisheries Northeast Division of the Office of Law Enforcement, NOAA General Counsel, and United States Coast Guard Districts One and Seven, authors of the *Enforceability Precepts for Northeast Regional Fishery Management Councils (June 2013)*, for sharing their publication with us and allowing us to incorporate selected material from that document. We thank Toni Kerns, Tina Berger, and Madeline Musante for their assistance in updating this document. We also acknowledge the opportunity afforded to our committee by the commissioners and staff at ASMFC to revise the 2015 *Guidelines*, and to make them available for routine use and reference.

HOW TO USE THIS DOCUMENT

The *Guidelines* are organized into five sections for ease of reference.

SECTION ONE (Page 3)

This section provides a statement on **general enforcement operations** that should be considered when implementing new management options or strategies.

SECTION TWO (Page 3)

This section presents **enforcement tools** that should be considered when implementing new management options or strategies.

SECTION THREE (Page 4)

This section provides general guidance in the form of **general enforcement precepts** that should be considered when evaluating fishery management options or strategies. These precepts apply regardless of the species or area under consideration.

SECTION FOUR (Page 6)

This section presents the relative **enforceability ratings** of specific management options. Using a matrix table, readers may quickly identify the relative enforcement characteristics of the management strategies, including their overall, dockside, at-sea, and airborne ratings.

SECTION FIVE (Page 8)

This section provides details regarding the **enforcement strategies and recommendations** for the management measures covered in the *Guidelines*.

SECTION ONE

General Enforcement Operations

Enforcement operations, whether they are at-sea, dockside, or airborne, are resource intensive. Available enforcement resources are maximized by enacting regulations that can be enforced at more than one point during fishing activity.

Regulations that can only be enforced dockside through the monitoring of offloads are particularly time consuming. Law enforcement agencies will never have sufficient personnel to monitor more than a small fraction of the total fish landed. This is mitigated in certain fisheries where enforcement can use electronic monitoring technologies such as vessel monitoring systems (VMS), electronic logbooks, and pre-landing notifications to monitor the fishery remotely and improve directed tasking of available resources.

Law enforcement relies on state and federal partnerships for at-sea patrol, and inspection efforts. Officers work with these partners to provide effective at-sea enforcement of state and federal regulations, particularly those involving area, gear, and prohibited species restrictions. Traditional aircraft, as well as drones, may be used with limitations in the enforcement of marine fishery regulations. Many states lack these types of resources and, for those that do have a program, budget and or policy may limit use of said resources for this enforcement application.

SECTION TWO

Enforcement Tools

Enforcement tools are management measures that are not specifically designed to limit catch or effort but to aid in the enforcement of other management measures that do so. Enforcement tools such as electronic reporting, pre-landing notification, and VMS have improved the effectiveness of certain regulations by allowing enforcement staff to focus effort on high priority areas. These tools do not replace traditional enforcement but rather complement patrol work and inspections. The requirement for some of these tools should be considered essential for effective enforcement of some management measures (e.g., VMS requirement for closed areas). New and emerging technologies such as cameras, ropeless fishing and others should continue to be explored.

SECTION THREE

General Enforcement Precepts

SIMPLICITY

The most enforceable regulations are those that are simple, realistic, easy to understand, and presented in an accessible way to the regulated community.

Simple, straightforward regulations are easier for the regulated community to understand and remember, which is critical for voluntary compliance. They are also more enforceable because violations of simple regulations are easier to detect and to prove. For example, a simple regulation such as “possession of an undersized fish” stands on its own. A violation of this regulation would apply regardless of where the fish was taken, how it was harvested, or any other regulatory variable. Conversely, complex regulations are more susceptible to confusion, misunderstandings, and differing interpretations among the regulated community, law enforcement personnel and the court system.

The proliferation of regulations frustrates industry as well as law enforcement personnel. Cumulative, piecemeal modification of regulations to address fishery or environmental changes inevitably leads to more complex and occasionally even contradictory regulations unless the entire suite of regulations for a particular species is carefully reviewed in its entirety when modifications are made.

Every effort should be made to write regulations in simple, plain language that avoids jargon or technical terminology. And, where possible, all related regulations for a given species should be bundled or linked together in the appropriate regulatory format.

CONSISTENCY

Regulations should make every effort to minimize exceptions and exemptions. Wherever possible, managers should adopt the same management measures among different fishery management plans, across different state boundaries, and between state and adjacent federal waters. When considering modes of fishing, consistent regulations within specific sectors creates better compliance. For example, when regulations offer a different size and possession limit for a specific user, based on means of fishing or a specific location of fishing, this creates confusion among the users and regulators, reducing the effectiveness of a regulation.

Anytime you have an exception to a regulation, such as under a conservation equivalency, you have potentially made the regulation more difficult to enforce. The LEC recognizes that conservation equivalency is a useful tool for fishery resource managers working within the collaborative structure of ASMFC. However, to the extent possible, states should make every effort to work within a regional or coastwide regulatory framework. This is especially important where

two or more states share contiguous waters or concentrated fishing areas. When individual states choose conservation equivalency, this document should be used to select management measures that are the most enforceable.

To the extent possible, there should be consistent definitions of terms for management measures, gear types or use, measurement standards, regulatory areas, and between federal and state waters.

STABILITY

Regulations should avoid frequent changes. When this occurs, there must be a concerted outreach and educational effort to adequately inform the public. This principle especially applies to recreational angling, where bag or size limits that change from year to year diminish enforceability and increase the likelihood of unintentional violations.

Enforcement personnel may require several years just to provide adequate training or to get the equipment necessary to implement new or modified regulations. More frequent changes in regulations might result in little effective enforcement during those short regulatory periods.

EFFECTIVENESS

In general, the most effective regulations from an enforceability perspective are those based on controlling effort (closed area or season) and not the outputs (catch quota, trip limits). Effective regulations promote rather than hinder voluntary compliance. Development of effective regulations must consider and reflect available enforcement staffing, funding, technologies, and equipment.

In addition to adding complexity, the proliferation of new regulations often requires new or significantly enhanced enforcement resources. If added resources are not provided, enforcement will need to shift effort from what is currently being enforced. This can result in an arbitrary prioritization of enforcement effort that may or may not correspond to the conservation needs of the species affected.

Certain management measures can enhance effectiveness. For example, regulations that can be enforced through more than one means, or at more than one point during fishing operations, allow enforcement some flexibility in using available resources in the most efficient way possible. Regulations that strengthen documentation and labeling of fish and fish products would enable law enforcement personnel to track products back more effectively to the harvester and/or the initial purchaser and to intercept unlawful seafood at various points between harvest and final sale for consumption.

SAFETY

Regulations should be designed such that they do not create an unintended safety-at-sea issue. For example, specified allowable days for fishing may increase pressure to go out to sea when weather conditions are unsafe. Likewise, establishment and design of closed areas should consider safe and direct transit needs of fishers when weather conditions change rapidly.

SECTION FOUR Enforceability Ratings

The 2024 *Guidelines* included a survey of 20 voting members of the LEC who numerically rated the enforceability of 27 management measures based on three categories: dockside, at-sea, and airborne enforceability. The enforceability of each management measure was rated on a scale of one to five (1 = least enforceable, 5 = most enforceable) for each of the three categories. An average of at-sea and dockside ratings from the survey is also presented.

It is important to note the survey indicated limited applicability for airborne resources in the enforcement of most management measures. Therefore, the Airborne value was only included in the average rating when it increased the average value of the management measure. The LEC stresses that this does not imply that airborne resources are ineffective. While airborne enforcement may be restricted in applicability, there are clearly times and places when it is the most effective means of enforcement, thus an important enforcement tool.

The results of the updated survey are presented below in a visual matrix. Management measures were arranged in descending order of their average rating from the survey. Responses receiving a score of greater than or equal to 4 are color coded green, those with an average score greater than or equal to 3 but less than 4 are color coded yellow, and those less than 3 are color coded red.

Table 1. Enforceability of Marine Fisheries Management Measures

Management measures are ordered based upon the average of dockside and at-sea ratings. The enforceability of each management measure was rated numerically on a scale of one to five (1 = least enforceable, 5 = most enforceable) for each of the four categories. If the airborne rating increased the average rating, the inclusive average is indicated in parentheses.

Management Measures	Avg Dockside & Sea (avg w/Airborne)	Dockside	At-Sea	Airborne
Permits	4.61	4.53	4.68	1.53
Slot Limits	4.61	4.68	4.53	1.11
Prohibited Species	4.55	4.53	4.58	1.37
Bag / Possession Limits (Low Volume)	4.55	4.63	4.47	1.16
Maximum / Minimum Size Limits	4.53	4.63	4.42	1.21
Closed Seasons	4.18	3.89	4.47	3.21
Tagging, Labeling, or Marking of Species	4.00	4.26	3.74	1.11
Bycatch Prohibition	3.97	4.21	3.74	1.26
Trophy Fish Allowance	3.89	4.11	3.68	1.21
Vessel Monitoring System	3.82	3.63	4.00	2.74
Daily Trip Limits	3.82	4.32	3.32	1.26
Gear Marking requirement	3.50	2.68	4.32	1.95
Gear Regulations (excluding method of take)	3.42	2.89	3.95	1.89
Method of Take	3.37	2.53	4.21	2.11
Closed Areas	3.26 (3.58)	2.11	4.42	4.21
Catch and Release Fishing	3.24	2.95	3.53	1.58
Aggregate Trip Limits	3.16	3.42	2.89	1.26
Electronic Reporting	3.05	3.68	2.42	1.11
Gear Restricted Areas	3.05 (3.14)	1.84	4.26	3.32
Bycatch Limits by use of Weight or Volume	3.00	3.42	2.58	1.05
Days at Sea	2.87	2.95	2.79	1.74
Annual Quotas	2.84	3.32	2.37	1.05
Bycatch Limits by % of Total Catch	2.76	3.32	2.21	1.05
Harvest Tolerance by Weight, Volume or %	2.74	3.11	2.37	1.26
ITQ / IFQ / LAP	2.69	3.28	2.11	1.06
Limited Drag or Soak Time	1.89	1.11	2.68	1.84
Targeting Prohibition	1.87	1.63	2.11	1.16

SECTION FIVE

Enforcement Strategies and Recommendations

This section provides information about each of the management measures that were considered in the *Guidelines*. Included is a brief definition of the measure, its numerical ranking based on the survey results, and some thoughts for consideration when drafting regulations. For ease of organization, the management measures are listed alphabetically.

ANNUAL QUOTAS

Definition: A specified amount of a particular species is allowed to be landed per fishing year (or fishing season). Typically, a quota is established for the entire fishery, and occasionally is subdivided by region or time. Quotas are not usually employed for recreational fisheries.

Average Overall Rating: 2.84

Recommendations:

- A straightforward opening and closing of fishing to meet quota objectives is preferred over measures that will extend fishing, such as trip-limit triggers or progressive area closures, which complicate enforcement efforts.
- Incentives to under-report or not report are greater, so available enforcement resources must always be considered to ensure proper accounting of catch.
- Requirements for electronic reporting, timely reporting, and on-board monitoring, or tagging regulations can aid the enforcement effort.
- A well-designed catch documentation scheme to track fish from harvest to offloading, and through the processing and shipping phases, adds transparency and effective accountability.

BAG/POSSESSION LIMITS (low volume)

Definition: A specified amount of a particular species is allowed to be landed per trip, per fisher or per vessel. Low volume limits are established as some number of fish that is easily counted on board. They typically apply to recreational fisheries. In some cases, commercial fishers may also be subject to low possession limits.

Average Overall Rating: 4.55

Recommendations:

- This is considered among the more straightforward and enforceable regulations, at least as it would apply to small quantities of catch.
- Bag and possession limits should be consistent across state and federal boundaries, as well as modes of fishing. The standard of measurement should be clear if the limit is based on weight.

- A possession limit is superior to a landing limit and allows for at-sea as well as dockside enforcement.
- Requiring fish to remain intact facilitates identification. Particularly for large party charters, processing at-sea or filleting out catch onboard complicates enforcement. Where processing at sea is allowed, enforcement staff should be consulted. Supporting regulations requiring that skin must remain on filets, counting two filets as one fish regardless of size, or requiring retention of “racks” may aid enforceability in specific circumstances.
- Enforcement personnel find that frequently changing bag limits, either by mode of fishing or time of year are difficult for fishers to follow. Maintain limits for a minimum of 3 years to ensure consistency of enforcement and greater compliance.

BYCATCH LIMIT (Weight/volume)

Definition: Bycatch limits restrict, but do not prevent, the incidental harvest of non-targeted or otherwise protected species during legal fishing activity.

Average Overall Rating: 3.00

Recommendations:

- These limits, especially when there may be large quantities on board, are difficult to enforce and even more difficult to prosecute.
- Enforcement would be enhanced if bycatch were required to be segregated from the targeted species. Accurate count of catch onboard cannot easily be done at-sea due to species mixing, loading, icing, and the safety of boarding party in accessing the fish hold, etc.
- Typically, enforcement of bycatch limits are time and labor intensive.
- Bycatch limits and measurement standards should be consistent across jurisdictions.
- A possession limit is superior to a landing limit and allows for at-sea as well as dockside enforcement.

BYCATCH LIMIT (percent of total catch)

Definition: Bycatch limits restrict, but do not prevent, the incidental harvest of non-targeted or otherwise protected species during legal fishing activity.

Average Overall Rating: 2.76

Recommendations:

- These limits, especially when there may be large quantities on board, are difficult to enforce and even more difficult to prosecute.

- Enforcement would be enhanced if bycatch were required to be segregated from the targeted species. Accurate count of catch onboard cannot easily be done at-sea due to species mixing, loading, icing, and the safety of boarding party in accessing the fish hold, etc.
- Enforcement is very time and labor intensive to verify the percentage of the catch that is bycatch, and to successfully document excessive bycatch volumes.
- Bycatch limits and measurement standards should be consistent across jurisdictions.
- A possession limit is superior to a landing limit and allows for at-sea as well as dockside enforcement.
- Regulations should specify how much target species catch is required to justify retention of bycatch species and in what amounts. This is necessary to prevent a bycatch species from becoming the target species.

BYCATCH PROHIBITION

Definition: Incidental retention or possession of non-targeted or otherwise prohibited species caught during normal fishing operations is prohibited. Any bycatch must be discarded immediately. It may not be retained.

Average Overall Rating: 3.97

Recommendations:

- A bycatch prohibition is the most effective enforcement measure for bycatch.
- The enforceability of a bycatch prohibition is reduced if adjacent or nearby jurisdictional waters allow limited bycatch quantities (weight, volume, or percent of catch).
- Because of perceptions of waste from discarding bycatch, other regulations (gear specifications, soak times, area restrictions, and/or landing flexibility) may be implemented to minimize the likelihood of catching incidental or non-targeted species in large quantities. Enforcement challenges presented by these other regulations may negate the enforceability advantage of a full bycatch prohibition.
- Clearly identify when possession of a prohibited species is restricted (i.e., returned to the sea as soon as practicable).

CATCH-RELEASE FISHING

Definition: A fish or marine organism cannot be retained and must be immediately released at the site of capture without any unnecessary harm or destruction. This is typically applied to certain recreational fisheries. Temporary possession may be allowed for proper identification, photographing, or determining compliance with applicable regulations.

Average Overall Rating: 3.24

Recommendations:

- Regulatory language should clearly specify the conditions for any temporary possession of a catch and release species onboard (Identifying, measuring, photographing).

CLOSED AREAS

Definition: Fishing in a specified area is prohibited.

Average Overall Rating: 3.26 (3.58)

Recommendations:

- It is critical to have clearly defined areas. Use exact latitude/longitude and straight lines with regularly shaped areas as much as possible. Avoid general descriptions such as distance offshore, or a center point and radius. Do not use depth contours to define closed areas.
- Closed areas are more likely to be understood by fishers and result in less unintentional non-compliance, if they are regular in shape and, where possible, are oriented north-south and east-west in concert with latitude/longitude boundaries.
- While clearly defined, regularly shaped and large areas simplify enforcement, advances in tracking and monitoring technology are mitigating factors that might allow for smaller, irregularly shaped closed areas, especially when such areas are more likely to garner support and compliance, enhance safety at sea, or better protect fish and habitat.
- Successful prosecution of violations must include the capability to conduct vessel monitoring, aerial, and at-sea surveillance. Even with VMS capability, law enforcement may need to document the violation at-sea or via airborne detection to gather sufficient evidence for prosecuting the violation.
- Depending on the fishery and gear type, restrictions on only certain activities within a closed area may require at-sea boarding to document a violation.
- The more complete the closure to all fishing activity, the easier it is to enforce and successfully prosecute violations.
- Large, contiguous areas are preferable to numerous, smaller areas.
- If possible, the area should be closed to transit with fishing gear onboard. If transit is allowed, regulations should clearly specify the proper stowage of fishing gear during transit through the closed area. Transit must be specified as continuous, direct, and expeditious. If an allowance for loitering or stopping is included in regulations, there should be a mandatory call-in or reporting requirement.
- Gear closure areas or regulated mesh areas are difficult to enforce. If regulations only prohibit the use of a particular gear type within a closed area, possession of that gear within the closed area should be prohibited.

- Emergency, temporary, or short-term rolling closures are difficult to enforce and increase the likelihood of unintentional violations because communicating the requirement to the fishing fleet can be challenging. In addition, shifting closed areas within a season increases the confusion of enforcement officials on the status of an area.

CLOSED SEASONS

Definition: A specific fishing activity is prohibited during certain times of the year.

Average Overall Rating: 4.18

Recommendations:

- It is important to clearly define the date and times of seasonal closures, even to the minute.
- Describe what activity is allowed to occur before, during, and after the closure. For example: “all gear must be hauled in prior to the closure and gear may not be set prior to opening the closed area.”
- For high-value, short-duration fisheries, fishing for other species with the same or similar gear should be prohibited for at least 72 hours before and after the established closed season.
- Minimize exemptions or exceptions to prohibited activities during the closed season. If possible, avoid the allowance of gear placement or transport prior to the opening of a closed season.
- Enforcement is enhanced if retention, possession, purchase, and sale of species included in a seasonal closure are all prohibited. Violations could then be inferred if a covered species is encountered in the market during a closed season and would prompt an investigation into the origin of any fish or product encountered and how it got to market.
- Fisheries in which smaller vessels participate are more difficult to monitor during closed seasons. Small quantities of fish can be more easily hidden in the marketplace or sold outside of normal market channels or dealers when the season is closed.

DAYS AT-SEA

Definition: A specified number of days that are allotted for fishing for a particular species. Days at-sea are typically allocated to individuals or groups.

Average Overall Rating: 2.87

Recommendations:

- In its simplest form, days at-sea, without any exceptions or exemptions, is enforceable. However, it is labor intensive unless VMS or other electronic tracking is implemented.
- Additional complicated regulations, such as associated trip limits, should be avoided.

ELECTRONIC REPORTING

Definition: Data transmission, electronic logbooks or other digital recording systems are used to record harvest activity on a vessel. Enforceability is based primarily on use in commercial fishing operations.

Average Overall Rating: 3.05

Recommendations:

- Reporting systems should be established to record and transmit data as soon as possible after actual harvest activity occurs.
- Delayed reporting should be specified to occur on a daily or weekly basis. Lengthy delays between harvest activity and required reporting intervals reduce the effectiveness of enforcement monitoring.
- Data storage systems should be readily accessible to enforcement personnel in the field or on the water.
- Regulations should include provisions requiring tamper-resistant and tamper-evident electronic monitoring units.

GEAR MARKING

Definition: Regulations require specific marking of gear to identify the owner or permittee, to mark the location of gear that may not be visible at the surface, or for other identification purposes.

Average Overall Rating: 3.50

Recommendations:

- Regulations specifying the marking of gear should be clear and unambiguous as to the exact markings to be used, tags or tag placement, information included on any markings, visibility requirements or size of markings, and all other marking details to ensure standardized criteria can be enforced.
- Exceptions or exemptions to any gear marking requirements hinder overall enforcement efforts.
- To the extent possible, markings should be required to be located where enforcement personnel can easily and quickly inspect them both when deployed and while onboard awaiting use.

GEAR REGULATIONS (excluding method of take)

Definition: Specific gear types or gear modifications are restricted or prohibited. "Gear" might include not only the primary methods and tools to harvest the resource, but also the vessel, horsepower, number of traps, mesh size, and other such variables. In some cases, gear regulations might stipulate a

particular type or design (e.g., bycatch reduction devices, number of pots on a trawl, or escape panels on traps, etc.).

Average Overall Rating: 3.42

Recommendations:

- Limitations on the maximum length of line, number of fixed gear/hooks, traps or pots are extremely difficult to enforce and labor intensive to monitor on the water.
- Regulations stipulating how gear is to be deployed (e.g., soak time, net, or trawl depth) are difficult to enforce because of inspection requirements once the gear is deployed or being actively worked.
- Monitoring and checking gear require specialized equipment and training, and enforcement agencies may incur liability costs while handling gear.
- If a gear limitation is employed to restrict or control catch, an associated catch limitation should also be implemented. For example, a mesh size restriction to control the size of fish caught should have a companion minimum or maximum fish-size regulation.
- Standardize gear requirements, measurement procedures, equipment, and techniques across all appropriate jurisdictions and time periods.
- Trap limits are more enforceable in conjunction with trap tags being required on all traps at-sea (i.e., not transferable from trap to trap while underway).
- If a specific type of gear is prohibited for use in a fishery, then carriage of the gear type should also be prohibited.
- When considering specific gear restrictions within the recreational sector, such as terminal tackle in a hook and line fishery or prohibited use of a “gaffing” type device to retrieve a specific species of fish, officers must prove use of said equipment. The possession is not typically a violation unless possession on board a vessel or possession while fishing is articulated in the regulation.

GEAR RESTRICTED AREAS

Definition: Areas where the use of specific fishing gear is prohibited. Regulations may also prohibit the possession of such gear in the specified area.

Average Overall Rating: 3.05 (3.14)

Recommendations:

- These are labor intensive regulations to enforce. A gear restricted area often requires a boarding to determine if specific gear is legal, such as nets of a specific mesh size.
- In general, gear prohibitions are more enforceable than gear restrictions. Areas prohibiting nets are more enforceable than areas restricting certain net mesh sizes. Trap prohibitions are more enforceable than restrictions on certain trap types or sizes.

- Prohibit possession of restricted gear, rather than prohibiting “use” in a gear restricted area.
- Do not allow the use of similar gears within the area. Law enforcement assets may be able to differentiate between a trap boat and a dragger from a distance but will have to conduct a boarding to differentiate between two types of draggers.

HARVEST TOLERANCE (weight/volume/percent)

Definition: A catch is allowed to exceed a legally defined limit of allowable harvest by a defined amount. This may allow retention of over or undersized animals or retention of a defined number of harvested species over a specified landing limit.

Average Overall Rating: 2.74

Recommendations:

- Tolerances are often applied to large catches or landings, and so they may require extensive time and labor to verify the weight, volume, or percentage of the catch that exceeds a specified limit.
- Additional tools or equipment may be required to assess amounts of catch exceeding a specified limit.

ITQ / IFQ / LAP

Definition: Individual or vessel transferable fishing quotas and limited access programs where a specified amount of the total allowable harvest of a species is allotted to that individual or vessel. Such individual allotments may be taken over the course of a fishing season or year. This management measure is considered as it applies to commercial fishing operations only.

Average Overall Rating: 2.69

Recommendations:

- Enforcement is limited by the ability to monitor and verify individual quota limits and reported harvests under that quota. Real-time access to landings information is essential and it often requires cross-agency 24/7 communications.
- Regulations must limit the number and location of authorized landing points to ensure proper harvest monitoring and dockside enforcement.
- Specific call-in procedures should be established to maximize dockside enforcement capability.
- Monitoring and enforcing individual quotas are labor intensive. Because of variable and extended times during which an individual could fish, it is difficult to focus enforcement efforts for maximum effectiveness.

LIMITED DRAG OR SOAK TIME

Definition: This management measure limits the amount of time between deploying and hauling back the gear, normally to allow for live discards of bycatch. This management measure is considered as it applies to commercial fishing operations only.

Average Overall Rating: 1.89

Recommendations:

- Ensuring that specified time limits are followed requires close, at-sea enforcement of fishing operations, and/or onboard observer capabilities.
- Electronic reporting, onboard video monitoring, and vessel monitoring systems provide needed additional support for enforcement monitoring.

MAXIMUM/MINIMUM SIZE LIMIT

Definition: Possession of fish below/above a specified size is prohibited. *See also "Slot Limits"!*

Average Overall Rating: 4.53

Recommendations:

- This type of regulation is considered among the more straightforward and enforceable regulations, at least as it would apply to small quantities of catch.
- Standardized measurements, procedures, equipment, and techniques must be used across jurisdictions to be effective.
- Exceptions allowing at-sea or onboard processing hinder enforceability. There should not be any allowable filleting at sea. Measurement standards should stipulate head and tail intact.
- Maintain size limits for a minimum of 2-3 years to maximize compliance.
- Clearly explain in the regulation exactly how a species is to be measured (e.g., total length, curved fork length, fork length, etc.).
- Specified size tolerances are not necessary and complicates officer discretion in dealing with individual violations.

METHOD OF TAKE

Definition: A regulation stipulating a particular type of gear or fishing operation for legally harvesting a species. *See also "Gear Regulations (excluding method of take)."*

Average Overall Rating: 3.37

Recommendations:

- If a certain gear type is prohibited, that gear should not be allowed onboard if otherwise legal fishing gear or operations are being employed.
- Regulations should specifically prohibit the possession of any net with prohibited mesh sizes from being onboard the vessel. Similarly, if a net, pot, longline, or other gear type is required to be modified to reduce bycatch, then the possession of any gear not properly modified should be prohibited, not just prohibited from use.
- When considering specific gear restrictions within the recreational sector, such as terminal tackle in a hook and line fishery or prohibited use of a “gaffing” type device to retrieve a specific species of fish, officers must prove use of said equipment. The possession is not typically a violation unless possession on board a vessel or possession while fishing is articulated in the regulation.

PERMITS

Definition: Fishing (usually for an identified species) is only authorized by the issuance and possession of a permit.

Average Overall Rating: 4.61

Recommendations:

- This is considered among the more straightforward and enforceable regulations.
- Successful enforcement depends on real-time access to permit-holder databases.
- Technologically sound permit tracking systems should be implemented or already in place for any permit requirement.
- Laws or rules should provide for permit suspension and revocation upon successful prosecution of fishing violations.
- Permit numbers should be required to be displayed on commercial fishing vessels. Permits must always be in the possession of the fisher or vessel.

PROHIBITED SPECIES

Definition: Possession or retention of a particular species or group of species is prohibited.

Average Overall Rating: 4.55

Recommendations:

- This is considered among the more straightforward and enforceable regulations.
- For difficult-to-identify species, it may be necessary to include species groupings in a prohibition, or to ensure adequate identification training and tools for both fishers and enforcement personnel.

- Prohibitions should be restricted to a species or group of species across the board. There should be no exceptions for where it was taken or how it was harvested.
- Any permitted species kept on board must remain in a form easily differentiated from similar prohibited species.

SLOT LIMIT

Definition: Retention and/or possession of any species outside of a specified size range is prohibited. A slot limit may prohibit possession between a certain size range, or it may prohibit possession above or below a certain size range. *See also "Maximum/Minimum Size Limit"*

Average Overall Rating: 4.61

Recommendations:

- Regulations should clearly stipulate the range of the slot size and measurement standards should be consistent across all appropriate jurisdictions.
- Provisions allowing onboard filleting of fish or other processing of animals hinder enforcement of slot limits.

TAGGING, LABELING OR MARKING OF MARINE SPECIES

Definition: The act of placing an approved manufactured tag, label, or a manipulation/alteration of the respective marine species for the purpose of marking a marine species for a management purpose.

Average Overall Rating: 4.00

Recommendation:

- The tag should be an approved device that is identifiable, traceable, and tamper proof.
- The tag should be placed on a marine species in a location that will cause least harm to the species whether alive or dead.
- When any alteration to a marine species (i.e., fin clipping, v-notching or other) the requirement should be consistent among all jurisdictions.
- Improved documentation and labeling of fish and fish products would enable law enforcement to track such products back to the harvester and/or the initial purchaser and to intercept unlawful seafood product at various points between harvest and final sale for consumption.

TARGETING PROHIBITION

Definition: A regulation that prohibits the act of fishing for a particular species, to the exclusion of effort to catch other species.

Average Overall Rating: 1.87

Recommendations:

- This management measure is the least enforceable of the 27 considered in the *Guidelines*.
- Enforcement would require a level of physical observation and surveillance beyond the scope of most agencies.
- Any regulation that requires law enforcement to prove the “intent” of a fisher is less enforceable and difficult to prosecute.

TRIP LIMITS (daily)

Definition: A specified amount of a species is allowed to be caught and possessed onboard or landed by weight, volume, or number, daily. In most situations this applies to commercial fishing regulations. It is a form of possession limit intended to slow down the rate of harvest in a commercial fishery.

Average Overall Rating: 3.82

Recommendations:

- Enforcement is typically restricted to dockside and requires adequate measuring capability while offloading. Checking and verifying a trip possession limit at-sea is extremely difficult.
- A “possession limit” as opposed to a “landing limit” would allow better at-sea enforcement.
- There is a considerable time and labor commitment to enforcing such limits, even at dockside.
- When daily trip limits are implemented a limited number of designated landing points and pre-landing reporting would enhance enforcement.
- Limit any at-sea processing to ensure accurate identification of species subject to trip limits at dockside.
- The trip limit or possession amounts should be consistently defined and used across all appropriate jurisdictions, along with any measurement standards and techniques that are to be applied.
- Allowance for multi-jurisdictional trip limits (landing flexibility) should not be considered without an adequate cooperative management program to provide for responsible fishers, clearly labeled and segregated trip limits, and sufficient sanctions for a violation of the program rules.

TRIP LIMITS (aggregate)

Definition: A specified amount of a species is allowed to be caught and possessed onboard or landed by weight, volume, or number, covering a specified duration of time. In most situations this applies to the commercial sector. It is a form of possession limit intended to reduce bycatch, provide for safety at-sea while also considering the economics of the fishing industry. Aggregate limits allow a vessel to remain at-sea fishing, rather than having to come to port with each day’s possession limit. An aggregate possession limit allows for a vessel to catch a multi-day trip limits in one shortened trip but requires this vessel to stay out of a fishery for the remaining period. This type of allowance is typically based on a one- or two-week duration.

Average Overall Rating: 3.16

Recommendations:

- Most of the difficulties or concerns with enforcing daily trip limits would still apply to aggregate trip limits.
- It is even more difficult to enforce an aggregate trip limit at sea.
- This type of regulation allowing for a vessel to remain at sea and catch multiple daily trip limits precludes any significant at-sea enforcement.
- This type of aggregate program or a multi-jurisdictional trip limit (landing flexibility) program should not be considered without an adequate cooperative management program to provide for responsible fishers, clearly defined rules, and sufficient sanctions for a violation of the program rules.
- This type of program should require both a vessel monitoring system and timely electronic reporting.

TROPHY FISH ALLOWANCE

Definition: Usually applied in recreational fisheries. It allows retention of one or more fish over a specified maximum size or slot limit.

Average Overall Rating: 3.89

Recommendations:

- Any allowance for filleting or processing at-sea hinders enforcement of such provisions.
- Measurement standards should be consistent across all appropriate jurisdictions.

VESSEL MONITORING SYSTEM (VMS)

Definition: A requirement to keep a positioning transmitter (transponder) onboard a fishing vessel. The transponder transmits position and movement information at specified time intervals to the management agency.

Average Overall Rating: 3.82

Recommendations:

- As VMS use is expanded, it should incorporate data transmission regarding gear onboard and the fish being targeted. It can increase the efficiency and effectiveness of enforcement patrols and inspections but does not replace on-the-water or dockside enforcement requirements.
- VMS should be considered for any large-scale fishery that is conducted in remote waters or offshore where at-sea and airborne enforcement is difficult or inefficient.