



**NOAA
FISHERIES**

Joint Mid-Atlantic & New England Council Omnibus Alternative Gear-Marking Framework Adjustment

September 2025

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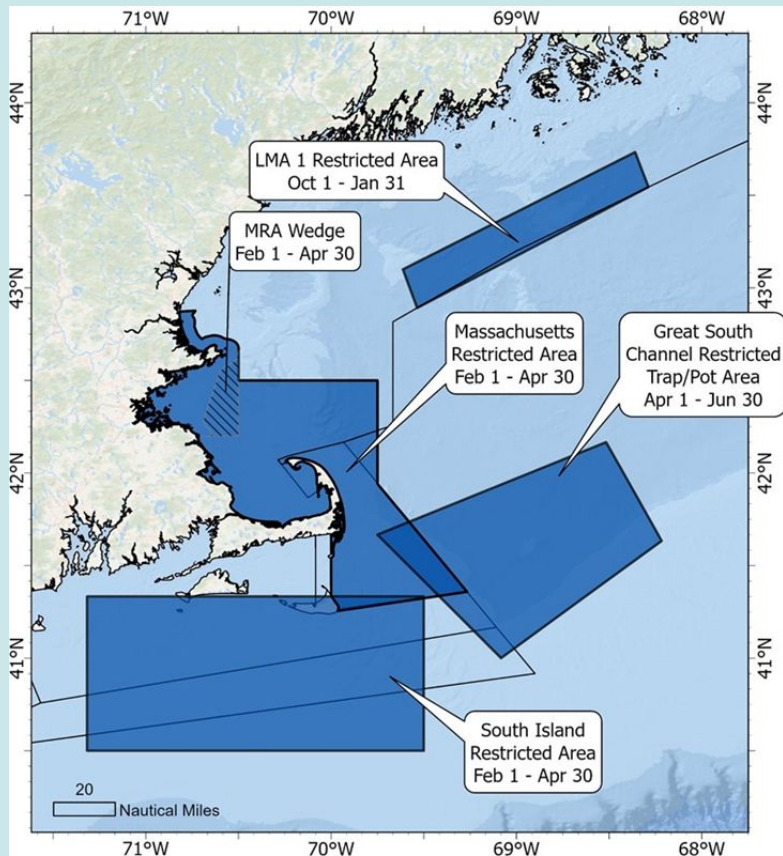


Action Summary

- Considers allowing alternative (i.e. digital) gear marking as another option to the currently required physical surface markings
 - Current gear-marking regulations require radar reflectors, pennants, highflyers, buoys, etc.
- Could allow (although, not immediately) the use of fixed gear without persistent vertical lines (such as on-demand rigged fishing gear)
- Changes could apply to some or all fixed-gear fisheries in the Northeastern U.S.
- Would not limit the use of current gear-marking methods
- Would not require the use of gear-marking alternatives or on-demand gear

Take Reduction Plan (TRP): Seasonal Closures to Buoy Lines

Current Northeast Lobster/Jonah crab Trap/Pot Restricted Areas



In 2021, TRP closures were expanded and modified from seasonal fishing closures to *persistent buoy line* closures for Northeast lobster and Jonah crab trap/pot gear

Changing gear-marking regulations could allow for increased fishing access, in the future, for fixed-gear fishermen for all fisheries with TRP restricted areas

Alternative Set 1: Authorization of Approved Gear-Marking Alternatives

Alternative 1A: No Action. This alternative would not allow for alternative gear marking and would continue to require current surface markings (radar reflectors, highflyers, etc.).

Alternative 1B: Region-wide alternative gear marking. would allow the use of alternative gear marking in all Federal waters within the Greater Atlantic Region (ME thru Cape Hatteras, NC).

Alternative 1C: Spatially and temporally limited alternative gear marking. would allow alternative gear marking during and within persistent buoy line restricted areas established by the Atlantic Large Whale Take Reduction Plan within the Greater Atlantic Region.

Alternative 1D: Spatially limited alternative gear marking. would allow alternative gear marking within persistent buoy line restricted areas established by the Atlantic Large Whale Take Reduction Plan within the Greater Atlantic Region during closures and in the same geographical areas when closures are not in place.

Functional Equivalence

Gear-marking alternatives would be approved based on functional equivalence to current gear marking

Essential Elements of a Functional Equivalent

- **Detectability:** ocean users are able to locate gear
- **Retrievability:** gear must have an identified means of retrieval
- **Identification:** gear is marked with identifying information
- **Enforceability:** enforcement can locate, retrieve, and redeploy gear

Beneficial Elements of a Functional Equivalent

- **Viewing distance:** gear can be detected from a similar minimum distance as current surface markings
- **Set direction:** gear's set direction is identifiable
- **Timing:** gear location info is accessible by others at the time of deployment and while it persists in the water

Approval Process Examples

Electronic Vessel Trip Reporting Software Approval

- Regulatory text: [50 CFR 648.7\(b\)\(1\)](#)
- NMFS [webpage](#) of approved software options
- [Software guidance documents](#)

Vessel Monitoring System Type-Approval

- Regulatory text: [50 CFR Part 600 Subpart Q](#)
- NMFS [webpage](#) of type-approved VMS units

Monitoring Service Provider Approval

- Regulatory text: [50 CFR 648.11\(h\)](#)
- NMFS [webpage](#) of approved monitoring service providers

Alternative Set 2: Letter of Authorization and Knowledge Demonstration Requirements to Use Approved Gear-Marking Alternatives

Alternative 2A: No Action. This alternative would not require a person to demonstrate knowledge of how to mark gear with any approved gear-marking alternatives.

Alternative 2B: Letter of Authorization and Demonstration of Knowledge Requirement. would require a person to obtain a Letter of Authorization documenting that they have demonstrated knowledge of how to mark gear with an approved gear-marking alternative.

Alternative 2C: Letter of Authorization Only. would require a person to obtain a Letter of Authorization to use a gear-marking alternative but would not require the demonstration of knowledge to obtain the Letter of Authorization.

Action Impacts

Alternatives		Direct and indirect impacts			
		Fishery Resources	Habitat/ Essential Fish Habitat	Protected Resources	Human communities
Alternative Set 1: Authorization of approved gear-marking alternatives	1A: No Action	0	0	Mod – to SI +	– to 0
	1B: Region-wide alternative gear marking	0	0	Mod – to Mod +	SI – to +
	1C: Spatially and temporally limited alternative gear marking	0	0	Mod – to Mod +	SI – to +
	1D: Spatially limited alternative gear marking	0	0	Mod – to Mod +	SI – to +
Alternative Set 2: Requirements to use approved gear-marking alternatives	2A: No Action	0	0	SI indirect – to 0	SI – to 0
	2B: Letter of Authorization and demonstration of knowledge	0	0	0 to SI indirect +	SI – to SI +
	2C: Letter of Authorization Only	0	0	SI indirect – to 0	SI – to 0

“–” signifies a negative impact; “+” signifies a positive impact; “Mod” refers to a moderate impact; “SI” refers to a slight impact; “0” signifies no direct or indirect impact

Feedback on Action

- Gear visualization by all ocean users
- Awareness by other ocean users of the presence of buoyless gear
- Gear conflict
- Real-time marking and internet access
- Ghost gear
- Safety at sea
- Equity
- Cost
- Location accuracy of digital gear markings
- Timing and fishermen's engagement/awareness of the Action
- Process for approving gear-marking alternatives
- Support for access to restricted areas



Action Timeline

April 2025	NEFMC & MAFMC initiated action
May 2025	ASMFC received updates
June 2025	NEFMC & MAFMC received updates
August 2025	ASMFC received updates
September 2025	NEFMC considers final action
October 2025	MAFMC considers final action; ASMFC receives updates on final action
2026	Request for Information
2026	Rulemaking

Even after rulemaking, gear-marking alternatives would need to be approved before use

Additional Slides for Reference

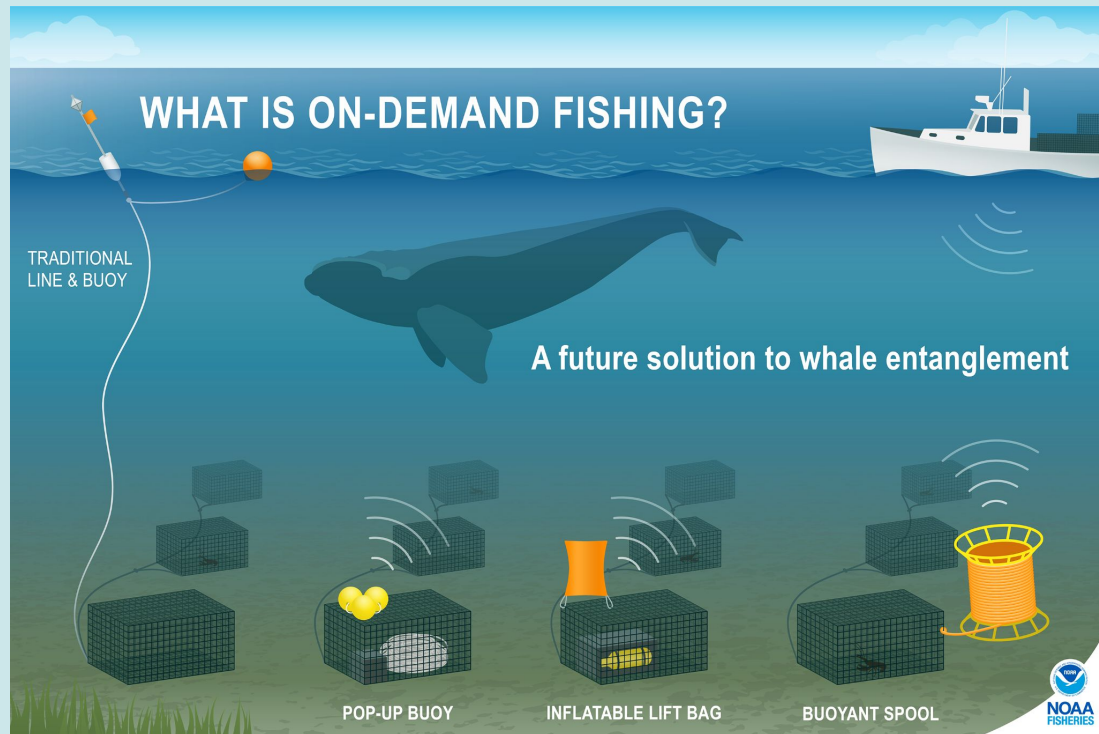


Take Home Messages

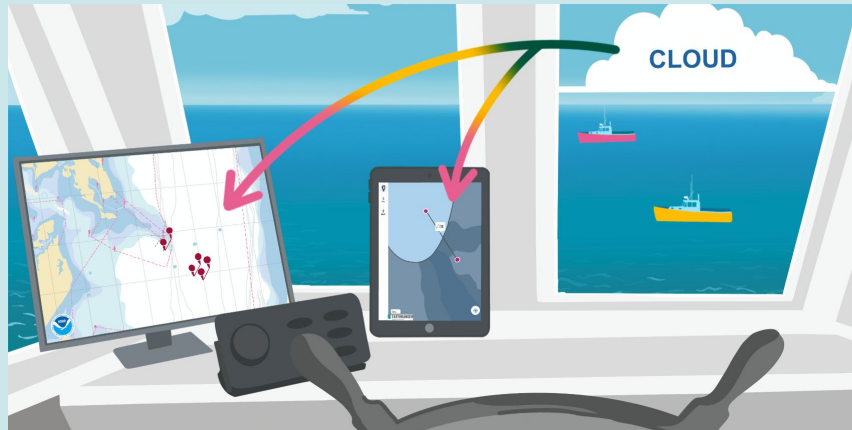
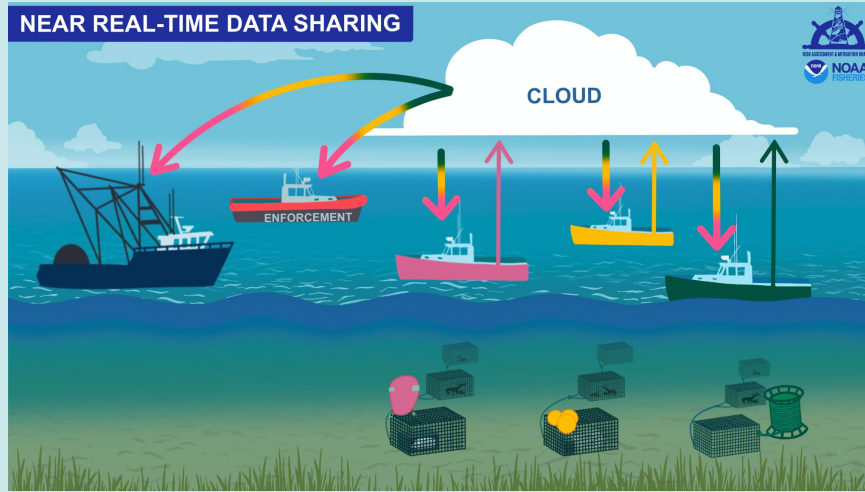
- Objective of this action is to provide additional fishing opportunities for fixed-gear fishermen
- Action focuses on gear marking of on-demand fishing
- This action would **not** allow the immediate use of on-demand fishing until additional steps are taken
 - Additional research is needed and work is ongoing to develop all aspects of an operational on-demand fishery
 - Future approval of gear will be necessary
- Action would **NOT**:
 - limit the use of current gear marking methods
 - require the use of alternatively marked gear
- Intend to provide more opportunities for public input

Allowing Gear Without Persistent Buoy Lines

- Revise regulations to allow for alternative (i.e., digital) gear marking
- Regulations would require current gear marking requirements OR a functionally equivalent alternative



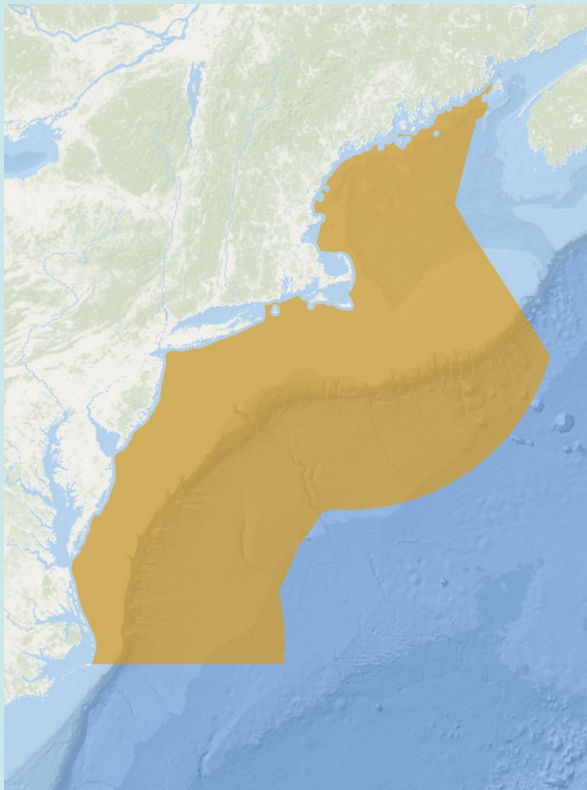
Potential Future of Gear-Marking Alternatives



Current Alternative Gear-Marking Research

- **NOAA NEFSC EFP on-demand research** ongoing since 2020 with 77 vessels
 - Over 15,500 hauls of traps, pots, and gillnets using on-demand retrieval
 - Gear from 10 manufacturers working as expected 90% of the time with fewer than 1 in 600 hauls resulting in the loss of a device
 - Other long-term research ongoing in ME, MA, CA, and Canada
 - CA dungeness and CN snow crab fisheries accessing otherwise closed areas
- **Alt. gear marking, sharing, and visualization research** ongoing since 2021
 - Solutions are interoperable
 - Visualization tools include free mobile app (ER Buoy), TimeZero V5, Olex (coming ASAP), and other brands (Garmen, etc) in the works
 - At sea satellite internet connectivity to receive gear set locations in real time. Broadband and Iridium solutions are being investigated
 - Broadband Satellite - 50 GB Starlink data plan (~\$250/mo)
 - Iridium Satellite - Blue Ocean Gear is developing a device to display gear markers on 7 different chartplotters (~\$25/mo)

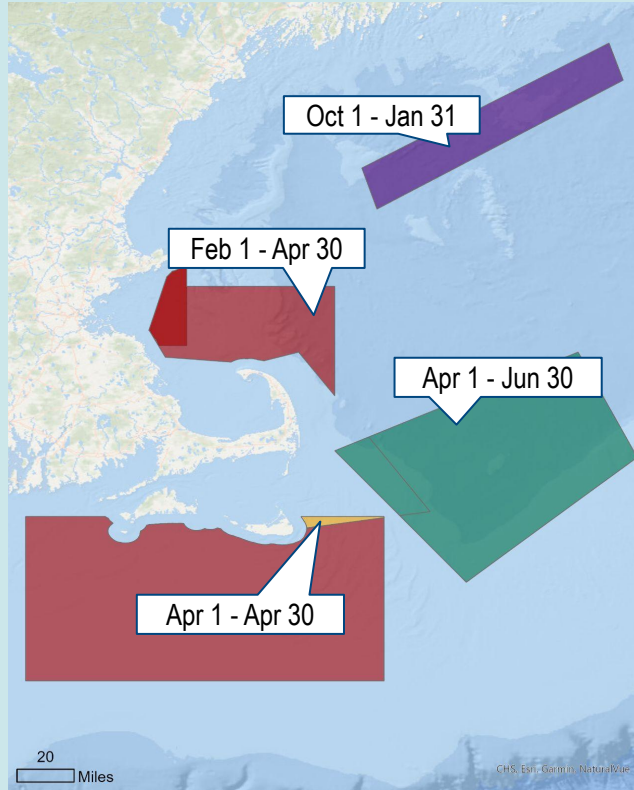
Alternative Set 1: Authorization of Approved Gear-Marking Alternatives



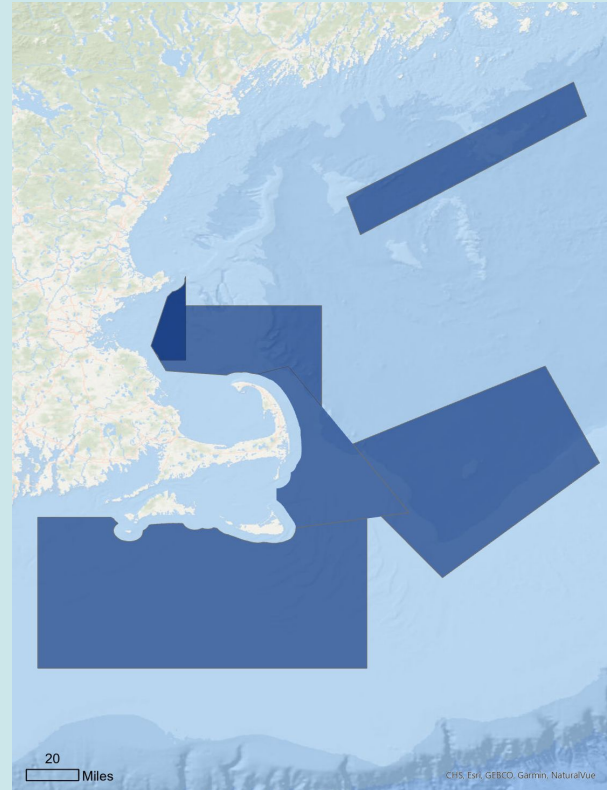
1B: Region-wide



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1C: Spatially & temporally limited



1D: Spatially limited