

# National EM Policy: Where have we been, and where are we now?

**George Lapointe**

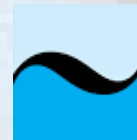
Net Gains Alliance

George Lapointe Consulting



GEORGE LAPOINTE CONSULTING LLC

MARINE FISHERIES AND OCEAN ENVIRONMENTAL POLICY



**NET GAINS ALLIANCE**

- **First National Electronic Monitoring Workshop**
  - **Seattle, WA**
  - **January 2014**



- **Second National Electronic Monitoring Workshop**
  - **SeaTac, WA**
  - **December 2016**

# **First National EM Workshop**

**Background: Over the past 10 years, a number of electronic monitoring studies have taken place around the country, but few have progressed to on-the-water applications where EM serves as the primary monitoring tool.**

# WORKSHOP OBJECTIVES

- **Facilitate a better understanding of the possible range of EM applications**
- **Determine solutions to current challenges impeding integration of EM**
- **Share lessons learned from pilot studies and early EM program design and integration efforts across regions**
- **Identify key program design elements and processes**
- **Understand cost considerations and implications of EM**
- **Provide tools to facilitate development of regional EM implementation plans**
- **Discuss Electronic Reporting (ER) needs in the context of developing effective EM programs**

# KEY TAKEAWAYS

- Integrating EM/ER into monitoring programs should be a collaborative process involving a broad range of managers and stakeholders
- Approach program design in a holistic manner
- Identify clear roles and responsibilities, but consider new models
- Setting clear, well defined program objectives is critical
- Identify, create and align incentives
- Think about costs upfront
- Data automation, integration and compatibility: a worthwhile investment
- Setting protocols and managing expectations about how data will be used upfront
- Pathways to implementation

# INFORMATION NEEDED

- **Who owns the data?**
- **Who can collect and hold EM data?**
- **Examples of successful performance standards and data protocols**
- **Information to help data integration efforts**
- **Examples of flexible regulatory approaches**
- **Finding and accessing alternative sources of funding**

# 2<sup>nd</sup> National EM Workshop, Dec 2016

## Objectives

- Facilitating a better understanding of the range of EM applications
- Discussing solutions to current challenges impeding the integration of EM
- Identifying key program design elements and processes
- Sharing lessons learned from pilot studies and early EM program design and integration efforts across regions
- Understanding cost considerations and implications of EM.

# Elements of success

- **Strong leadership and vision by fishermen and managers.**
- **Standing working groups of fishermen, managers, law enforcement, service providers, NGOs, and other stakeholders.**
- **High level of involvement by many stakeholders.**
- **Regular involvement and from with Councils.**
- **Sustained funding mechanism in North Pacific and West Coast after initial investment by NOAA Fisheries.**
- **Use of EM for catch monitoring.**
- **Video access provided to fishermen.**
- **Easing of logistical challenges for small vessels.**



# Best Practices

- Establish clear goals and objectives.
- Collaborate with all stakeholders for trust-building and consistency.
- Communicate regularly among stakeholders and, ideally, across regions.
- Use shared, specific terminology.
- Give time for programs to develop, including a pre-implementation period.
- Use Exempted Fishing Permits (EFPs) for learning and program adaptation.
- Build in flexibility to adapt to changing conditions and technologies.
- Focus programs regionally as much as possible
- Link data elements to program goals and objectives; maintain control of data access.
- Invest in research to improve efficiencies.
- Incentivize program improvement.

# Challenges

- **Building stakeholder buy-in.**
- **Providing long-term funding and agency staffing.**
- **Developing national guidance on data retention, confidentiality, and cost sharing.**
- **Addressing data concerns: access to data, confidentiality, quality, cost of acquisition, combining multiple data sources, connecting program design to data integration, distinguishing between video and derived data for records retention requirements.**
- **Making EM cost-effective and providing transparency in identifying program cost information.**
- **Funding research and development needed for technology development.**
- **Positioning EM as part of integrated electronic reporting and monitoring systems.**

# Challenges, cont.

- Implementing in fisheries with less than 100 percent observer coverage, and in complex fisheries (e.g., bottom trawl).
- Addressing volatility in voluntary EM programs.
- Overcoming expectation for low EM review rates when observer coverage is low.
- Incorporating EM data in stock assessments.
- Using EM to validate anecdotal information.
- Balancing between compliance and workability for fishermen.
- Considering incentives for EM participation (i.e., access to closed areas, relaxation of other restrictions).



**NOAA**  
**FISHERIES**

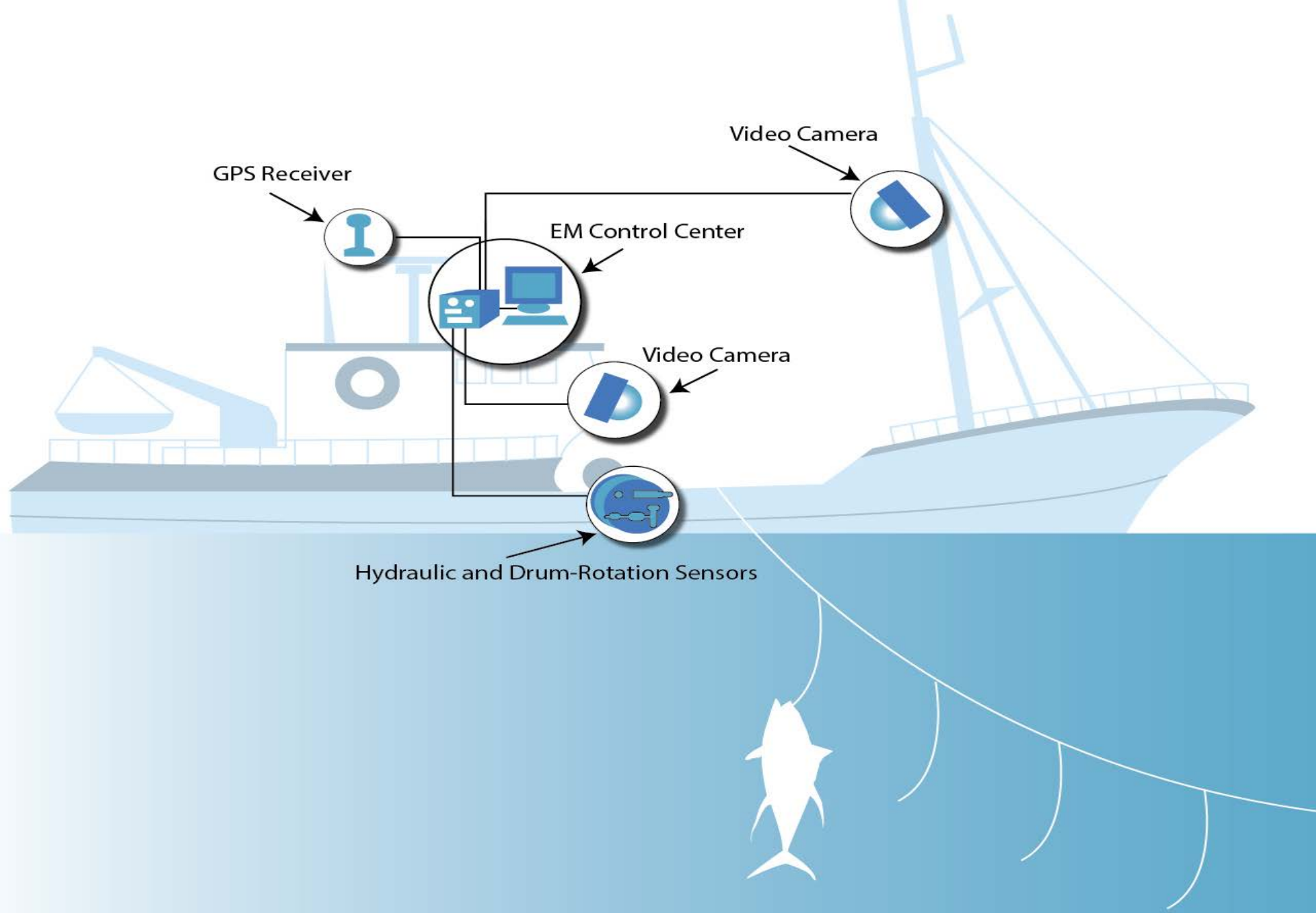
# Overview of Electronic Monitoring in U.S Fisheries

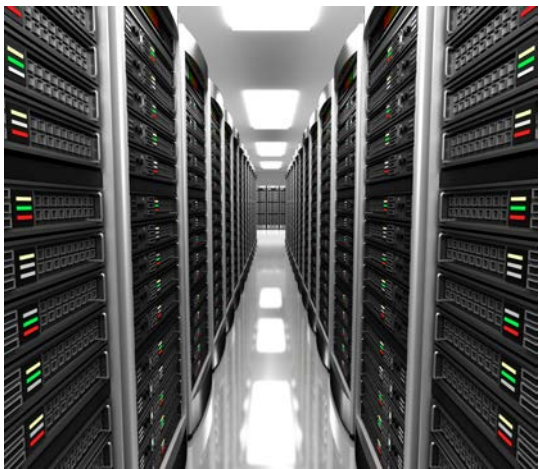
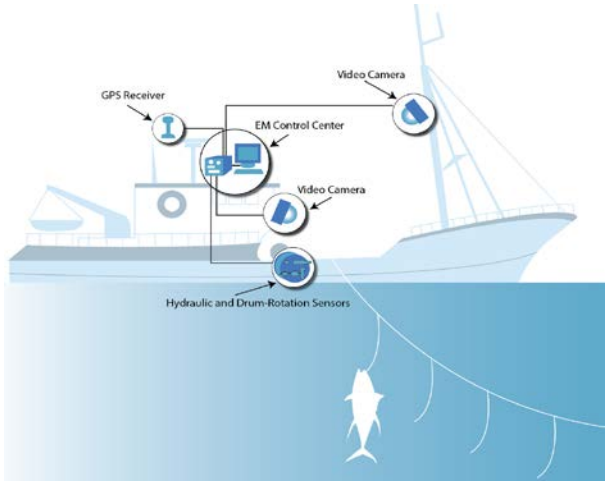
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# U.S. Electronic Monitoring Programs

Electronic monitoring (EM) is being piloted and implemented across the U.S. to expand and improve fisheries-dependent data collection, while reducing costs and increasing the timeliness of information. EM is used to audit logbook data, monitor compliance with discard requirements, and collect information on discards and bycatch. The programs on this map are listed in three categories: Implemented and under regulation (**bold**); pre-implementation, under an exempted fishing permit (EFP), and/or being considering by their respective Fishery Management Council (*plain*); and pilot projects (*italics*).

For more information, visit [fisheries.noaa.gov/national/fisheries-observers/electronic-monitoring](https://fisheries.noaa.gov/national/fisheries-observers/electronic-monitoring).

## Alaska

- **Bering Sea and Aleutian Island (BSAI) Non-Pollock Trawl Catcher/Processor (C/P)**
- **Bering Sea Pollock Trawl C/P and Motherships**
- **Central Gulf of Alaska Rockfish Trawl C/P**
- **BSAI Pacific Cod Longline C/P**
- **Small Boat Fixed Gear (Longline and Pot)**
- *Pollock Trawl Catcher Vessels*
- *Halibut Deck Sorting Trawl C/P*

## West Coast

- **Whiting Mid-Water Trawl**
- **Fixed Gear IFQ**
- *Non-Whiting Mid-Water Trawl*
- *Groundfish Bottom Trawl*
- *Nearshore Rockfish*

## Pacific Islands

- *Pelagic Longline - Hawaii Deep and Shallow Set*

## Greater Atlantic

- *Northeast Multispecies*
- *Herring Mid-Water Trawl*
- *Northern Gulf of Maine Scallop*
- *Northeast Multispecies For-Hire*

## Atlantic Highly Migratory Species

- *Pelagic Longline*

## Southeast

- *Snapper-Grouper*

# Electronic Technologies (ET) Policy Directive

## 2013

- Encourage the adoption of ETs, be effective and efficient, meet all needs
- Consider a combination of technologies, including electronic monitoring (EM)
- Utilize open source code and standards
- NOAA Fisheries will assemble guidance and best practices
- Consider funding options, NMFS and industry to coordinate on costs

## 2019

- Added observer technologies
- Annual updates (rather than biannual)
- New guidance on updating Regional ET plans
- Clarified objectives and definitions



# Regional ET Implementation Plans

## Guidance and template out to Regions in June

- Regional 5-year vision and priorities
- Council actions, research, development, and pilot projects
- Data integration and interoperability (e.g., One touch reporting)
- Impediments to implementation and resource needs
- Tables to track progress for EM, ER, VMS, observer technology, etc.
- EM costs and transition plans

## Communication and outreach

- Engage and coordinate with all stakeholders
- Encourage cross-regional planning

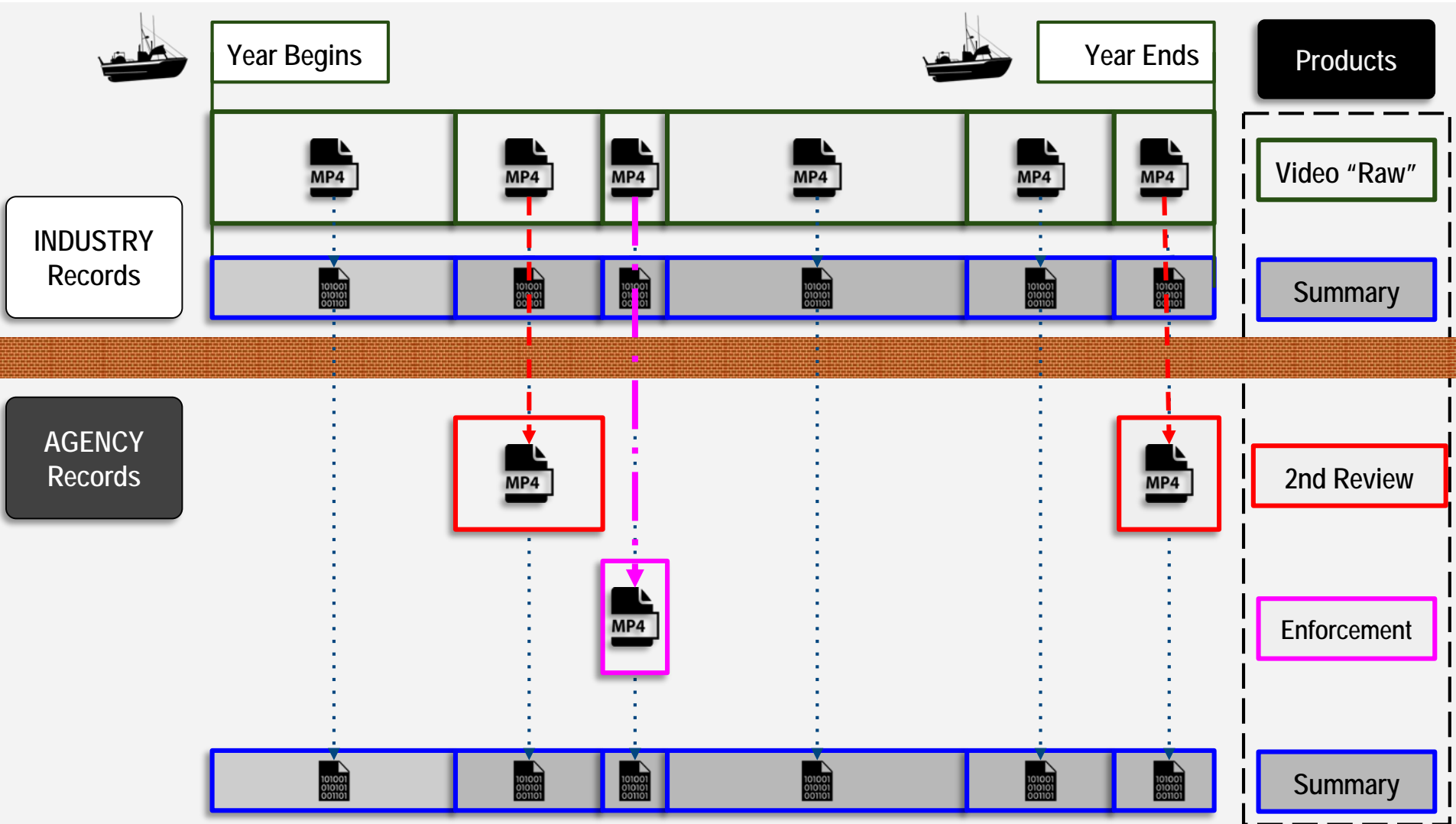
Updated ET implementation plans --- June 2020

# Procedural Directive on Cost Allocation for EM

- Sampling – Hardware, video review and storage
- Administrative – Program support, provider certification/auditing, data analysis, and storing Federal records

Function	Cost Responsibility
Sampling	<ul style="list-style-type: none"><li>• Industry</li><li>• NOAA Fisheries - fees collected from industry - EX: North Pacific landings fee</li><li>• NOAA Fisheries for specific Federal programs - EX: ESA, MMPA, SBRM</li></ul>
Administrative	<ul style="list-style-type: none"><li>• NOAA Fisheries</li><li>• NOAA Fisheries - fees collected from industry - EX: West Coast cost recovery program</li></ul>

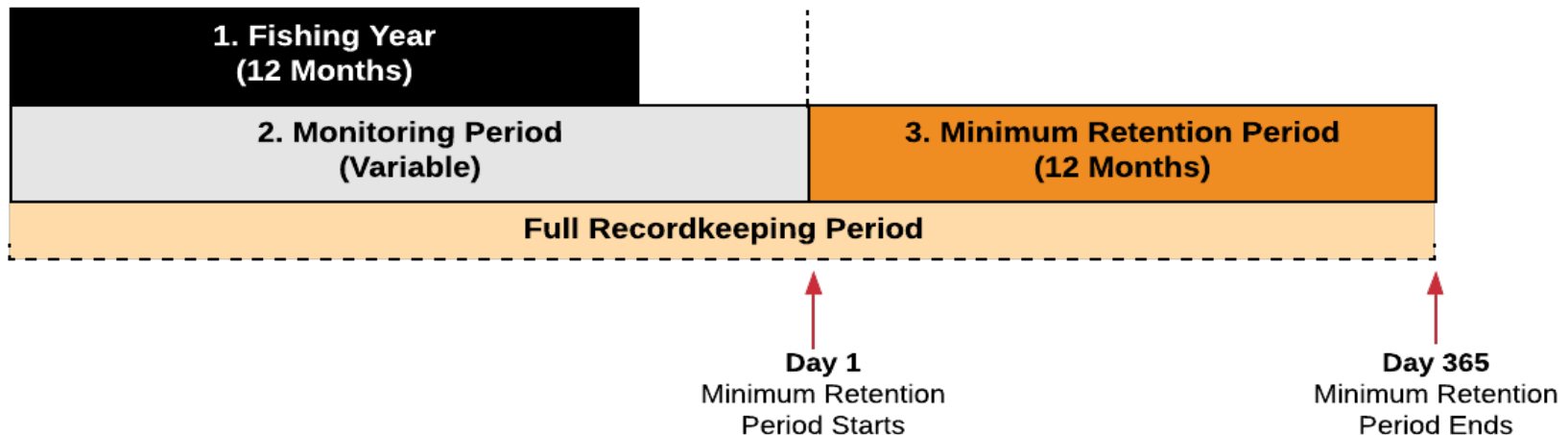
# Third-Party EM Model Explained



# Third-Party Data Retention Procedural Directive

- Current – Retained indefinitely
- Future – Procedural directive and guidance to Regions
- Process – Comments due Dec 31, 2019, final policy in 2020

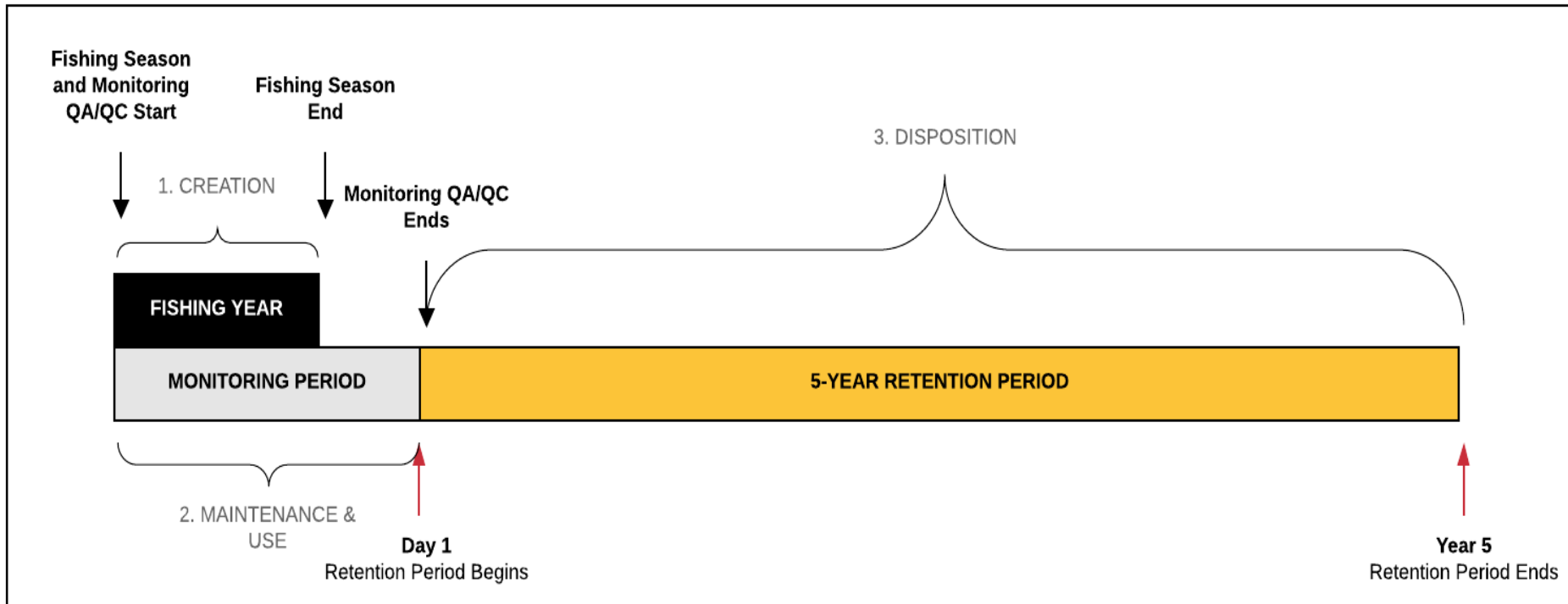
The monitoring period often extends beyond the close of a fishery as data are collected, processed, and analyzed



# Federal Records Retention Schedule

## National Archive and Records Administration (NARA)

- Current - Retain with observer records (indefinitely)
- Future – New retention schedule for video and images
- Process - NARA publishes an FR notice, 45-day public comment period



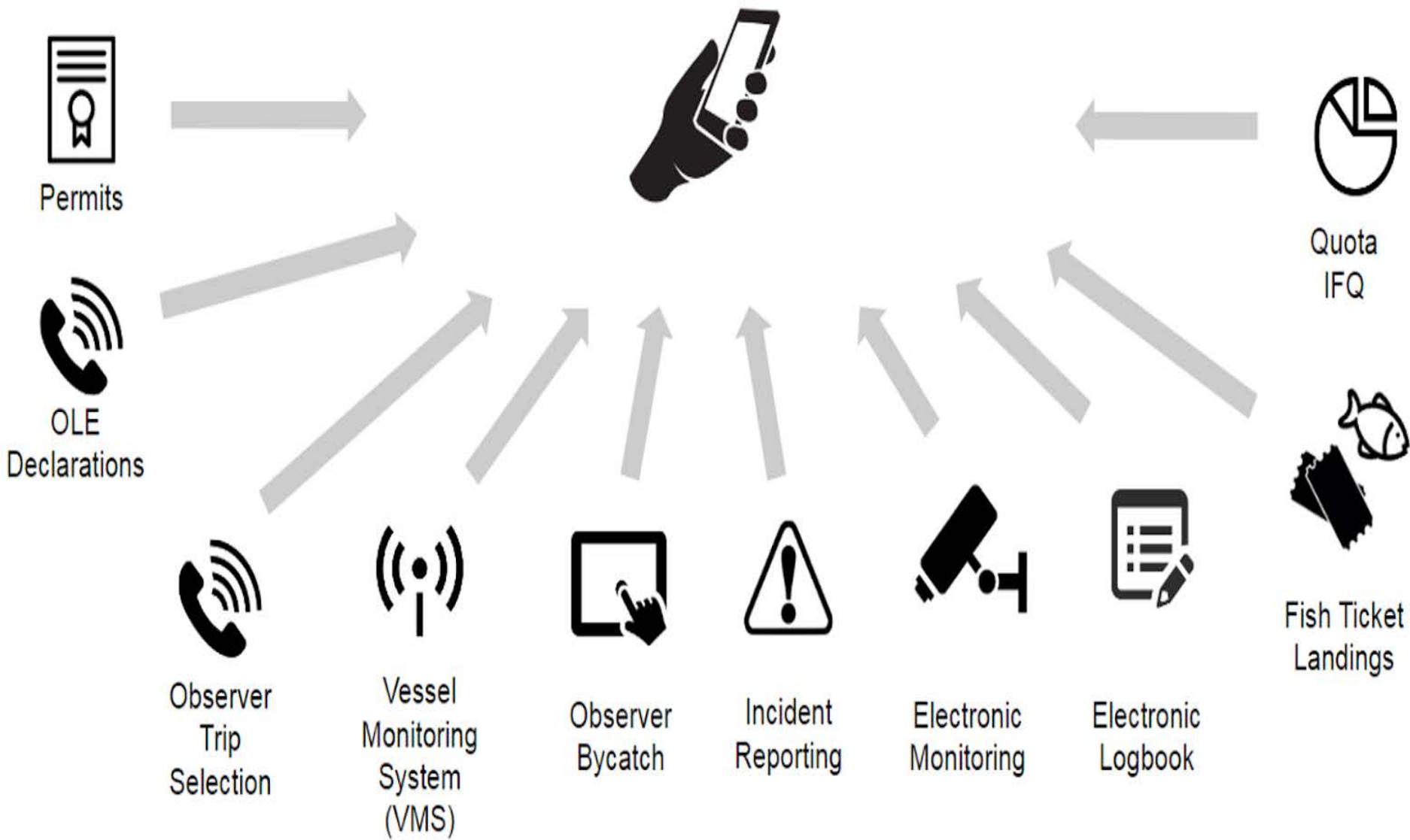
# Electronic Technologies Progress in 2019

## Policy Development

- Policy Directive for Electronic Technologies (final)
- EM Cost Allocation Procedural Directive (final)
- Third-Party Video Retention Requirements (draft)
- Retention Schedule for Federal Records (draft)

## National EM Guidance and Best Practices

- EM program design
- Minimum standards and best practices
  - Vessel systems
  - Video review and data management
  - Data standardization and uses
- EM case studies
- Status of EM-related policies



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