



Meeting Monitoring Priorities in U.S. Fisheries

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Outline of Presentation

- National context for fishery monitoring discussion.
- Process to develop a nation-wide strategy that includes Electronic Monitoring (EM).
- Short and long-term implications for the Pacific Council.



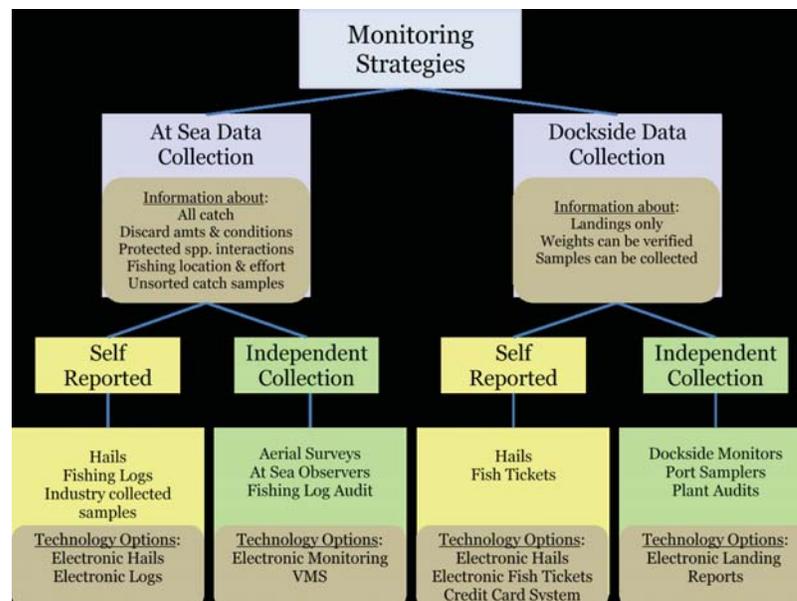
Monitoring Purposes in U.S. Fisheries

1. Scientific data collection – assessments, socioeconomic, ecological and ecosystem research.
2. Compliance – are regulations being followed (fishery and protected species).
3. Management – data to support real-time management (quota monitoring, closures, etc.).

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There are a variety of fishery-dependent monitoring strategies...



Source: MRAG, 2010

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...Choosing a strategy has implications for data quality, data timeliness, policy, and costs.

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Current Nation-wide Situation...

- Management today (ACLs, AMs, catch shares) has substantially increased the demands for high-quality, real-time fishery data.
- Budgets of NOAA, NMFS and Regional Fishery Management Council are increasingly constrained.
- Increased observer coverage requirements have produced high cost burdens >> Problematic for both industry-funded programs (e.g., AK and catch shares fisheries), and non-catch share fisheries.
- The current strategy of catch monitoring in the U.S. is neither economically viable nor strategic.

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Current Nation-wide Situation...

- Use of electronic technology (e-logbooks and cameras) is being suggested to improve cost-effectiveness of data collection.
- Many electronic methodological and case studies occurring in all regions.

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Current Nation-wide Situation...

- Over 20 U.S. EM pilot projects since 2002 (some for multiple years)
 - Accounting for catch, bycatch, discards
 - Monitoring in 100 percent retention fisheries
 - Compliance monitoring for pre-sorting activities
- NW hake trawl fishery discontinued use of EM in 2011
- Ongoing pilot projects in AK, NE, and NW
- Two compliance projects in place in AK

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Current Nation-wide Situation...

- However, many monitoring programs are being developed or revised with little coordination between the respective Councils & without accessible information regarding 'best-practices'
- Many decisions are being driven by cost-avoidance, without access to latest monitoring technology, and with no guidance on these topics from NOAA.

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The Challenge

Why no operational EM programs for science or management?

1. Need to mitigate or resolve policy, technical, budgetary, enforcement/regulatory impediments to a way-forward on EM.
2. In the process, re-examine monitoring requirements in the context of all alternative methodologies that can achieve a more cost-effective and sustainable program.
3. Be prepared to realign regulatory framework that matches management with technical and fiscal constraints on monitoring.
4. Improve nation-wide communications and collaboration.

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NMFS Goal for 2012

Formulate a requirements-based Strategy to improve fishery-dependent data collection programs taking into account:

- Regulatory, management, science and enforcement needs
- Industry support
- Funding sources and sustainability
- Cost-effectiveness
- Electronic technology capabilities

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Strategy Thought Questions

What is the right mix of observers and EM in addressing our monitoring needs? It will depend on the goals and objectives of the monitoring program; technology; and cost.

In what circumstances is EM less expensive? In some cases EM might be more expensive than observers, in others less expensive. Compliance monitoring use? Quota monitoring use?

What is in the critical path to full EM implementation? There have been many pilot projects; why haven't more EM projects been implemented?

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Approach to Goal

NMFS Science Board & Leadership Council

- Discussed EM concepts and specific NWR /NER groundfish issues
- Devised work plan to develop Strategy
- Initiated Six White Papers to evaluate/resolve key impediments
- Focus on the regulatory, policy, and technological implications of each issue.

Councils (incl. SSCs, APs), States/data collection partners

- Input requirements, ideas, best practices, feasibility, new issues

Short term > Fund 2012 WC groundfish, other EM projects

Long Term > By Fall 2012 have a way-forward on Strategy

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Subjects of Six EM White Papers

1. Analysis of Existing EM Technologies/Programs
2. Enforcement Issues/Impediments
3. Legal/Confidentiality Concerns
4. Research & Development Requirements
5. Re-alignment of Management and Monitoring
6. Funding Options

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Implications for Pacific Council

- NMFS will provide 2012 financial support for Electronic Technologies as follows:
 - ✓ **West Coast Groundfish Electronic Monitoring**
 - ✓ New England Groundfish E-logbooks
 - ✓ Gulf Shrimp E-logbooks

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Implications for Pacific Council

Added support from **National Fish and Wildlife Foundation** Fisheries Innovation Grants for Electronic Technology

2011 Awards – 6 Grants total for \$992K; \$719K match (1 GOM, 1AK, **2 Pac**, 2 NE)

2012 Final Proposals under review, 8 for EM totaling \$1.15M (4 NE, 1 SA, 1 AK, **2 Pac**)
Awards to be made Apr 30th

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Implications for Pacific Council - Next Steps

- Work with CCC/Councils to set up appropriate opportunities and venues to work on resolution of issues impeding EM adoption.
- Develop guiding principles/best practices for implementing EM in U.S. fisheries.
- Devise more options to help develop and pay for EM.
 - Appropriated funds
 - Set-asides/Industry funds
 - Commercial/value-chain partners
- Incorporate EM results into a cost-effective and strategic approach to sustainably meet data collection requirements.

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Summary

- Electronic monitoring has potential in a comprehensive monitoring strategy that would likely also include observers, logbooks, and dockside monitoring.
- In the short-term, NMFS is supporting research and testing of EM in 2012 for the West Coast Groundfish fishery.
- In the long-term NMFS is producing a strategy for a cost-effective and strategic approach to sustainably meet data collection requirements.

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