

Atlantic Large Whale Take Reduction Plan Monitoring Strategy Outline

ALWTRP Monitoring Questions:

- **Are MMPA goals being met?**
 - Short-term?
 - Long-term?
- If not, is it due to ineffectiveness of existing regulations? (**Effectiveness Monitoring**)
 - Are management measures ineffective during current times/areas?
 - Are management measures effective but need spatial/temporal adjustment?
- If not, is it due to non-compliance? (**Compliance Monitoring**)
 - How can non-compliance be identified and addressed?

1. Are MMPA goals being met?

a. Effectiveness Monitoring

i. *Biological Analyses:*

1. Statistical analyses of identified metrics to investigate effectiveness:
 - a. Known large whale serious injuries and mortalities due to entanglement over time
 - b. Analysis of seasons and areas in which entanglements occur
 - c. Time lapses between detected large whale entanglements
2. Use scarification data as indication of entanglement
 - a. Acknowledge limitations/uncertainty

ii. *Gear Analyses*

1. Continue to gather and analyze large whale entanglement and gear identification data to assess ALWTRP measures
 - a. Disentanglement Response
 - b. Entanglement gear response and recovery
2. Conduct a retrospective analysis of past responses to retrieve dead animals and guidelines to standardize future response/data collection

iii. *Oceanographic/Fisheries-based Analyses:*

1. Analysis of oceanic conditions/trends related to large whales
2. Analysis of the impacts of fisheries regulations/amendments on large whales

b. Compliance Monitoring

i. Enforcement:

1. Joint Enforcement Agreements
2. NOAA Office of Law Enforcement
3. United States Coast Guard
4. Pulse operations

ii. Industry behavior:

1. VMS to investigate ALWTRP violations
2. Utilize observer data as an indication of compliance and focus pulse operations in an area where non-compliance may be occurring
 - a. Acknowledge limitations
3. Maine DMR/Maine Marine Patrol Pilot Compliance Rate Development
4. Quantify enforcement efforts
5. Training enforcement personnel on ALWTRP regulations
6. Implement enforceable regulations

iii. Education and Outreach:

1. Outreach to fishing industry on ALWTRP regulations
2. Outreach on importance of reporting
3. Quantify outreach efforts overall
4. Produce clear, consistent descriptions of management measures within the ALWTRP

2. NMFS Actions

a. Reports Produced

i. Annual NMFS ALWTRP monitoring update report

ii. ALWTRP Status Summary every 5 years