

NOAA Fisheries Mission:

Stewardship of living marine resources for the benefit of the Nation through science-based conservation and management and promotion of the health of the environment

Protected Resources Mission:

Recovery

Recovery = Programs for
Proactive Conservation + Listing + Recovery &
Conservation

Introduction

The Protected Resources Program (PR) within NOAA Fisheries is responsible for recovery and conservation of marine species protected under the Marine Mammal Protection Act (MMPA) and/or the Endangered Species Act (ESA).

NOAA Fisheries must regularly evaluate the status of these species and manage them according to the prohibitions and exemptions provided under these mandates. These mandates are accomplished through permits, authorizations, and other regulatory mechanisms. NOAA Fisheries must assess the impact of proposed activities on protected species and their habitats, and these impacts must be considered in the context population status, trends, human impacts, and environmental factors.

Timely, accurate, and precise biological information is the key to effective recovery and conservation programs. This information is needed to design effective and efficient conservation programs. This means allowing activities to continue with minimal socioeconomic impacts, while still providing for species recovery.



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A Big Picture Approach

to Better Decisions in
Protected Resources
Management

Protected Resources Program

NOAA Fisheries

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TIER ONE

Improve Stock Assessments using Existing Data and Levels of Survey Effort

The first tier explores what improvements can be made to stock assessments using **existing** resources and programs through changes in:

- Methodology
- Development of improved survey and analytical methods, and
- Evaluation of existing data sets to fill in the gaps.

First tier improvements will result in products that are more comprehensive, timely, and quality controlled.

TIER TWO

Elevate Stock Assessments to New National Standards of Excellence

The focus of the second tier is:

- Expanded data collection and research initiatives, and

spawning Pacific salmon, protected under the ESA

- New data and research initiatives.

Species are prioritized based on an evaluation scheme that considers what information is needed and the potential for addressing human impact problems. More frequent or increasingly thorough assessments would be prepared for high priority species, while baseline data would be collected on lower priority species.



CURRENT STATUS OF ASSESSMENTS

Species	Total Stocks	Tier 1	Tier 2	Tier 3
Marine Mammals	167	135	32	0
Sea Turtles	13	13	0	0

TIER THREE

Next Generation Assessments

The National Research Council Report (2002), "Science and the NMFS" listed five problem areas:

- Development of research plans and analysis relevant to MMPA and ESA mandates
- Collection and analysis of spatial data to meet the needs of managing using spatial models
- Development of new models with multispecies interactions, trophic structure, and ecosystem effects
- Development of analytical techniques that link socioeconomic use data to biological data
- Linking market and non-market values with management scenarios

These are the PR needs for Tier 3 in a nutshell. These "next generation" assessments move away from traditional approaches to considering ecosystem-based concepts. For a few key species, Tier 3 assessments will involve the collection of a basic but comprehen-

a breaching humpback whale, a species protected under the ESA and MMPA



sive suite of data relating the animal to its ecosystem.

Third tier stock assessments will be conducted with new processes and models. These ecosystem considerations include concepts like:

- Multispecies interactions
- Animal and ocean health
- Oceanography
- Seasonal abundance
- Analysis of movement in space and time, and
- Feeding habits, to name a few.

The first step in achieving the goal of next generation assessments is a NOAA Fisheries workshop to determine what data should be collected and how to prioritize needs.

A Case Study

The range of long-finned and short-finned pilot whales overlap in the North Atlantic Ocean. Difficult to tell apart, Tier 1 stock assessments and fishery bycatch data have historically combined them. The two species are currently managed with a single combined estimate of their acceptable level of bycatch, or Potential Biological Removal (PBR). While precautionary for conservation, this approach has the potential to overly restrict the commercial pelagic longline and trawl fisheries, which are known to unintentionally take pilot whales.



a North Atlantic pilot whale

Improving the quality of stock assessments for the two species to Tier 2 would provide species specific abundance and bycatch estimates based on a better definition of their distribution in US waters and better data on stock structure. Species specific estimates of PBR and of the allowable take by fisheries could be produced.

Completing Tier 3 assessments would further improve bycatch management by allowing management actions to be tailored to match the seasonal and spatial overlaps between fisheries and pilot whale habitat and distribution. The result would be improved conservation of both species and the reduced chance of fisheries being closed.