

Successful Ecosystem-based Management

The U.S. North Pacific Groundfish Fishery

The National Research Council, an arm of the National Academy of Sciences, identified a number of management strategies that fishery managers should employ to help ensure a sustainable ecosystem. In every instance, the North Pacific Groundfish Fishery off Alaska meets or exceeds the recommended measures.

National Research Council Recommendations	North Pacific Groundfish Management
<i>Adopt Conservative Catch Limits</i>	For 25 years, annual catch limits for the Alaska groundfish fishery have been set at or below the acceptable biological catch (ABC) level recommended by fishery scientists.
<i>Set Annual Catch Limits</i>	Annual catch limits are set for each groundfish species, and fisheries close when catch limits are reached. All fish caught, whether retained or discarded, count against the catch limit.
<i>Incorporate Ecosystem-based Goals into Management</i>	From conservative catch quotas, to habitat protections, to bycatch controls, to comprehensive monitoring and enforcement, ecosystem considerations are a key component of management decisions.
<i>Provide for Adequate Monitoring and Enforcement Through a Comprehensive Federal Fishery Observer Program</i>	Catch amounts are recorded by federally trained observers, who report catch amounts on a real-time basis. All groundfish vessels longer than 125 feet carry an observer at all times and Alaska pollock catcher/processors carry two observers. Smaller vessels carry observers 30 percent of the time. Observers are also present at onshore processing plants.
<i>Adopt a Precautionary Approach to Deal with Uncertainty</i>	Since the 1970s, managers have adhered to a precautionary approach in estimating fish population abundance and setting catch levels. Decisions are based on the “best scientific information available.”

Conduct Scientific Research to Improve Understanding of Fish Stocks

U.S. government scientists conduct annual research surveys to collect information necessary to estimate fish population abundance. Federal scientists have research survey data covering several decades, enhancing the accuracy of annual estimates.

Reduce Excess Fishing Capacity

The establishment of fish harvesting cooperatives, which effectively ended the “race for fish,” resulted in fewer vessels in the fishery.

Establish Marine Protected Areas

Managers have established a comprehensive habitat protection policy. Tens of thousands of square miles of productive fishing grounds are closed permanently or seasonally to some or all fishing to protect marine resources and sensitive habitat.

Include Bycatch and Discard Mortality in Catch Accounting

Managers have implemented numerous measures to reduce bycatch and to ensure an accurate accounting of bycatch that does occur. In all cases, bycatch-related mortality is included in catch accounting.

Increase Use of Technology to Improve Conservation

Observers file catch reports electronically, which allows for real-time catch accounting to ensure that catch limits are not exceeded. Many vessels are equipped with Vessel Monitoring System (VMS) units that allow federal regulators to track vessel locations on a real-time basis.

Encourage Voluntary Conservation Efforts by the Fishing Industry

The fishing industry works with a private company, Sea State, Inc., that reviews observer data, identifies areas of high bycatch, and advises vessels on the grounds to avoid such areas.

Allow for Stakeholder Participation in the Fishery Management Process

Members of the environmental community, the commercial and sport fishing sectors and Alaska natives serve on the North Pacific Fishery Management Council, which develops federal rules. All meetings are open to the public, and public comment is solicited on all proposed management measures.