

Fisheries Management from New England Ocean News
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Although limiting the amount of fish caught is a simple concept, fisheries management is, in fact, inherently complex. This complexity stems from the dynamic nature of the marine environment and the wide range of demands from people interested in it. While it is difficult for managers to balance all of the competing interests, when formulating a fisheries management plan (FMP), the bottom line is that only so many fish can be removed before fish stocks lose the ability to replenish themselves. If fishing is too intense, stocks begin to shrink and society's benefit from the resource is diminished. To prevent this from happening, scientists and managers set biological objectives for the FMP. Managers can employ a wide variety of tools to meet the FMP's objectives including:

1. **Fishing capacity restrictions.** Fishing permits limiting the number of fishing boats allowed to fish, and days at sea (DAS), limiting the number of days fishermen are allowed to fish each year.
2. **Landing restrictions.** Setting annual limits on the amount of fish that may be brought ashore. The limit for the year is called the Total Allowable Catch (TAC). Managers may choose to set daily fish limits (trip limits), or limits for each boat (Individual fishing quota, IFQ), to avoid exceeding the TAC.
3. **Gear restrictions.** Controlling the type and amount of fishing gear used – nets, hooks, pots, etc. – as well as the size and shape of mesh.
4. **Area specific restrictions.** Controlling where fishing can take place (closed areas) at any given time in the year.

The New England Fishery Management Council (NEFMC) develops and adjusts FMPs for a variety of fish stocks within New England waters. FMPs are subject to review by the National Marine Fisheries Service (NMFS), and to approval by the Secretary of the Department of Commerce.

To be effective, FMP regulations must be consistent with the yearly fluctuations of a fish stock. Each year, the Secretary of Commerce, following guidance from the NMFS, publishes a Status of the Stocks report to Congress. This describes the health of the fish stocks in each of the nation's region. In 1996, the Sustainable Fisheries Act (SFA) amended the Magnuson-Stevens Fishery Conservation and Management Act, the primary law governing marine fisheries. The SFA required, among other things, that the health of a stock be assessed in terms of the abundance of fish, or biomass (B), and the level of fishing activity, or fishing mortality (F), that it is supporting. If the biomass is too low, the stock is considered overfished. If the fishing mortality level is too high, overfishing is occurring. Congress determined that in order to derive "the maximum benefit for the nation", fish stocks must be managed to the optimum level of biomass (B_{msy}) and fishing mortality (F_{msy}) that can produce the maximum sustainable yield (MSY) on a continuing basis.

If a stock is overfished, or if overfishing is occurring, managers must develop or adjust the FMP to address those problems and restore the fishery to the point where it is, once again, producing "the maximum benefit for the nation". Major changes to the FMP must be made through full amendments. Slight changes can be dealt with through framework adjustments.