

Public Law 89-701, known as the Fish Protein Concentrate Act, was enacted by the 89th Congress in 1966. It authorizes construction of one FPC experimental and demonstration plant and leasing of another.

The objective of the legislation is to develop the best and most economical processes and methods of manufacturing for human food a nutritious, wholesome, and stable fish protein concentrate, and to conduct food technology and feasibility studies on such products.

Funds for construction of the federally-owned plant were included in the appropriation request for Fiscal Year 1968. The sum of \$1,000,000 was requested for construction of the plant and \$700,000 was requested for its operation, maintenance and associated research for the first year.

Construction of the federally-owned plant followed by leasing an improved plant will provide adequate means to refine the isopropyl alcohol extraction technique; develop new and better techniques, using both lean and fatty fish; and learn specifics in regard to cost, capacities, byproducts, and economics. In operating these plants, the capability of the key personnel will be developed, and will provide the nucleus for the "export" of knowledge for the planned United States-sponsored plants abroad.

BRIEF DESCRIPTIONS OF ADDITIONAL PROGRAMS IN FISH AND FISHERY PRODUCTS

HABITAT INVESTIGATIONS FOR COMMERCIAL FISHERIES

Fisheries resources management requires extensive information on aquatic environments, such as:

1. Habitat factors determining abundance and availability of stocks
2. Productive capacity of ecological complexes
3. Expected production of fish from given brood years
4. Control of conditions required to maintain or to enhance production

This information is obtained from basic research programs on resource-related variables in the freshwater, estuarine, and marine habitats. Bureau of Commercial Fisheries environmental programs attack the above problems in all three habitats in or near the Atlantic and Pacific Oceans, the Gulfs of Mexico and Alaska, the Bering and Caribbean Seas, the Great Lakes, and inland reservoirs. Research is underway not only for the existing profitable salmon, tuna, crabs, oysters, alewives, and menhaden fisheries, but also for developing and latent fisheries, including ocean perch, hake, herring, and groundfish, that are becoming increasingly important to the United States.

Because the habitats are increasingly jeopardized by industrialization and land developments, the problems of maintaining fisheries resources require continuing research concerning the relationship of resources to environment.

MARINE FINFISH

United States fishermen need forecasts on the abundance and distribution of fish. Marine finfish programs of the Bureau of Commercial Fisheries provide data for predictions of abundance and distribution, for maintenance of maximum sustained yield, and for preparation for international negotiations. Proper protection of fish stocks and U.S. fishing rights on the high seas can be achieved only through international agreements.

During the five-year planning period beginning in 1969, emphasis will be devoted to studies of underutilized and unutilized species. These include the hake, anchovy, and groundfish resources of the eastern Pacific and the tuna resources of the tropical Atlantic, on all of which new fisheries are developing. Research on menhaden, Atlantic herring, and New England groundfishes will continue, to determine the causes of the marked fluctuations in catch that are characteristic of these well-established fisheries. The battle to maintain valuable salmon runs despite changed river conditions will continue. Emphasis will be placed on reducing the losses of downstream migrants, on improving the accuracy of predictions, and on increasing knowledge of the environmental requirements for maximum salmon production.

With support from Federal Aid Programs (PL 88-309 and PL 89-304), State fishery research and development activities will be greatly strengthened. On a matching-fund basis, and supplementary to Bureau programs, work will be conducted in fish tagging, food studies, fish culture, inventories of local fish stocks, and life history studies.