Sec. 1881c. Fisheries research

(a) In general

The Secretary shall initiate and maintain, in cooperation with the Councils, a comprehensive program of fishery research to carry out and further the purposes, policy, and provisions of this chapter. Such program shall be designed to acquire knowledge and information, including statistics, on fishery conservation and management and on the economics and social characteristics of the fisheries.

(b) Strategic plan

Within one year after October 11, 1996, and at least every 3 years thereafter, the Secretary shall develop and publish in the Federal Register a strategic plan for fisheries research for the 5 years immediately following such publication. The plan shall -

- (1) identify and describe a comprehensive program with a limited number of priority objectives for research in each of the areas specified in subsection (c) of this section;
- (2) indicate goals and timetables for the program described in paragraph (1);
 - (3) provide a role for commercial fishermen in such research, including involvement in field testing;

- (4) provide for collection and dissemination, in a timely manner, of complete and accurate information concerning fishing activities, catch, effort, stock assessments, and other research conducted under this section; and
- (5) be developed in cooperation with the Councils and affected States, and provide for coordination with the Councils, affected States, and other research entities.

(c) Areas of research

Areas of research are as follows:

(1) Research to support fishery conservation and management, including but not limited to, biological research concerning the abundance and life history parameters of stocks of fish, the interdependence of fisheries or stocks of fish, the identification of essential fish habitat, the impact of pollution on fish populations, the impact of wetland and estuarine degradation, and other factors affecting the abundance and

availability of fish.

- (2) Conservation engineering research, including the study of fish behavior and the development and testing of new gear technology and fishing techniques to minimize bycatch and any adverse effects on essential fish habitat and promote efficient harvest of target species.
- (3) Research on the fisheries, including the social, cultural, and economic relationships among fishing vessel owners, crew, United States fish processors, associated shoreside labor, seafood markets and fishing communities.
- (4) Information management research, including the development of a fishery information base and an information management system under section 1881 of this title that will permit the full use of information in the support of effective fishery conservation and management.

(d) Public notice

In developing the plan required under subsection (a) of this section, the Secretary shall consult with relevant Federal, State, and international agencies, scientific and technical experts, and other interested persons, public and private, and shall publish a proposed plan in the Federal Register for the purpose of receiving public comment on the plan. The Secretary shall ensure that affected commercial fishermen are actively involved in the development of the portion of the plan pertaining to conservation engineering research. Upon final publication in the Federal Register, the plan shall be submitted by the Secretary to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Resources of the House of Representatives.

Sec. 1881d. Incidental harvest research

(a) Collection of information

Within nine months after October 11, 1996, the Secretary shall, after consultation with the Gulf Council and South Atlantic Council, conclude the collection of information in the program to assess the impact on fishery resources of incidental harvest by the shrimp trawl fishery within the authority of such Councils. Within the same time period, the Secretary shall make available to the public aggregated summaries of information collected prior to June 30, 1994 under such program.

(b) Identification of stock

The program concluded pursuant to subsection (a) of this section shall provide for the identification of stocks of fish which are subject to significant incidental harvest in the course of normal shrimp trawl fishing activity.

- (c) Collection and assessment of specific stock information For stocks of fish identified pursuant to subsection (b) of this section, with priority given to stocks which (based upon the best available scientific information) are considered to be overfished, the Secretary shall conduct -
 - (1) a program to collect and evaluate information on the nature and extent (including the spatial and temporal distribution) of incidental mortality of such stocks as a direct result of shrimp trawl fishing activities;
 - (2) an assessment of the status and condition of such stocks, including collection of information which would allow the estimation of life history parameters with sufficient accuracy and precision to support sound scientific evaluation of the effects of various management alternatives on the status of such stocks; and
 - (3) a program of information collection and evaluation for such stocks on the magnitude and distribution of fishing mortality and fishing effort by sources of fishing mortality other than shrimp trawl fishing activity.
- (d) Bycatch reduction program

Not later than 12 months after October 11, 1996, the Secretary shall, in cooperation with affected interests, and based upon the best scientific information available, complete a program to -

- (1) develop technological devices and other changes in fishing operations necessary and appropriate to minimize the incidental mortality of bycatch in the course of shrimp trawl activity to the extent practicable, taking into account the level of bycatch mortality in the fishery on November 28, 1990;
- (2) evaluate the ecological impacts and the benefits and costs of such devices and changes in fishing operations; and
- (3) assess whether it is practicable to utilize bycatch which is not avoidable. □□□

(e) Report to Congress □□□

The Secretary shall, within one year of completing the programs required by this section, submit a detailed report on the results of such programs to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Resources of the House of Representatives.

(f) Implementation criteria

To the extent practicable, any conservation and management measure implemented under this chapter to reduce the incidental mortality of bycatch in the course of shrimp trawl fishing shall beconsistent with -

- (1) measures applicable to fishing throughout the range in United States waters of the bycatch species concerned; and
- (2) the need to avoid any serious adverse environmental impacts on such bycatch species or the ecology of the affected area.

US code: Title 16, Section 760e

Sec. 760e. Study of migratory game fish; waters; research; purpose The Secretary of Commerce is directed to undertake a comprehensive continuing study of the migratory marine fish of interest to recreational fishermen of the United States, including species inhabiting the offshore waters of the United States and species which migrate through or spend a part of their lives in the inshore waters of the United States. The study shall include, but not be limited to, research on migrations, identity of stocks, growth rates, mortality rates, variations in survival, environmental influences, both natural and artificial, including pollution, and effects of fishing on the species, for the purpose of developing wise conservation policies and constructive management activities.