tion of scientific research programs, and shall be a representative of an agency that contributes substantially, in terms of scientific research capability and budget, to the Program.

#### (d) Support personnel

An Executive Secretary shall be appointed by the Chairperson of the Committee, with the approval of the Committee. The Executive Secretary shall be a permanent employee of one of the agencies or departments represented on the Committee, and shall remain in the employ of such agency or department. The Chairman of the Council shall have the authority to make personnel decisions regarding any employees detailed to the Council for purposes of working on business of the Committee pursuant to section 6651 of title 42.

## (e) Functions relative to global change

The Council, through the Committee, shall be responsible for planning and coordinating the Program. In carrying out this responsibility, the Committee shall—

- (1) serve as the forum for developing the Plan and for overseeing its implementation;
- (2) improve cooperation among Federal agencies and departments with respect to global change research activities;
- (3) provide budgetary advice as specified in section 2935 of this title;
- (4) work with academic, State, industry, and other groups conducting global change research, to provide for periodic public and peer review of the Program;
- (5) cooperate with the Secretary of State in—
  - (A) providing representation at international meetings and conferences on global change research in which the United States participates; and
  - (B) coordinating the Federal activities of the United States with programs of other nations and with international global change research activities such as the International Geosphere-Biosphere Program;
- (6) consult with actual and potential users of the results of the Program to ensure that such results are useful in developing national and international policy responses to global change; and
- (7) report at least annually to the President and the Congress, through the Chairman of the Council, on Federal global change research priorities, policies, and programs.

(Pub. L. 101–606, title I, §102, Nov. 16, 1990, 104 Stat. 3097.)

## § 2933. United States Global Change Research Program

The President shall establish an interagency United States Global Change Research Program to improve understanding of global change. The Program shall be implemented by the Plan developed under section 2934 of this title.

(Pub. L. 101–606, title I, 103, Nov. 16, 1990, 104 Stat. 3098.)

## § 2934. National Global Change Research Plan

## (a) In general

The Chairman of the Council, through the Committee, shall develop a National Global

Change Research Plan for implementation of the Program. The Plan shall contain recommendations for national global change research. The Chairman of the Council shall submit the Plan to the Congress within one year after November 16, 1990, and a revised Plan shall be submitted at least once every three years thereafter.

## (b) Contents of Plan

The Plan shall—

- (1) establish, for the 10-year period beginning in the year the Plan is submitted, the goals and priorities for Federal global change research which most effectively advance scientific understanding of global change and provide usable information on which to base policy decisions relating to global change;
- (2) describe specific activities, including research activities, data collection and data analysis requirements, predictive modeling, participation in international research efforts, and information management, required to achieve such goals and priorities;
- (3) identify and address, as appropriate, relevant programs and activities of the Federal agencies and departments represented on the Committee that contribute to the Program;
- (4) set forth the role of each Federal agency and department in implementing the Plan;
- (5) consider and utilize, as appropriate, reports and studies conducted by Federal agencies and departments, the National Research Council, or other entities;
- (6) make recommendations for the coordination of the global change research activities of the United States with such activities of other nations and international organizations, including—
  - (A) a description of the extent and nature of necessary international cooperation;
  - (B) the development by the Committee, in consultation when appropriate with the National Space Council, of proposals for cooperation on major capital projects;
  - (C) bilateral and multilateral proposals for improving worldwide access to scientific data and information; and
  - (D) methods for improving participation in international global change research by developing nations; and
- (7) estimate, to the extent practicable, Federal funding for global change research activities to be conducted under the Plan.

## (c) Research elements

The Plan shall provide for, but not be limited to, the following research elements:

- (1) Global measurements, establishing worldwide observations necessary to understand the physical, chemical, and biological processes responsible for changes in the Earth system on all relevant spatial and time scales.
- (2) Documentation of global change, including the development of mechanisms for recording changes that will actually occur in the Earth system over the coming decades.
- (3) Studies of earlier changes in the Earth system, using evidence from the geological and fossil record.
- (4) Predictions, using quantitative models of the Earth system to identify and simulate

global environmental processes and trends, and the regional implications of such processes and trends.

(5) Focused research initiatives to understand the nature of and interaction among physical, chemical, biological, and social processes related to global change.

## (d) Information management

The Plan shall provide recommendations for collaboration within the Federal Government and among nations to—

- (1) establish, develop, and maintain information bases, including necessary management systems which will promote consistent, efficient, and compatible transfer and use of data;
- (2) create globally accessible formats for data collected by various international sources; and
- (3) combine and interpret data from various sources to produce information readily usable by policymakers attempting to formulate effective strategies for preventing, mitigating, and adapting to the effects of global change.

#### (e) National Research Council evaluation

The Chairman of the Council shall enter into an agreement with the National Research Council under which the National Research Council shall—

- (1) evaluate the scientific content of the Plan; and
- (2) provide information and advice obtained from United States and international sources, and recommended priorities for future global change research.

## (f) Public participation

In developing the Plan, the Committee shall consult with academic, State, industry, and environmental groups and representatives. Not later than 90 days before the Chairman of the Council submits the Plan, or any revision thereof, to the Congress, a summary of the proposed Plan shall be published in the Federal Register for a public comment period of not less than 60 days

(Pub. L. 101–606, title I, §104, Nov. 16, 1990, 104 Stat. 3099.)

## § 2935. Budget coordination

## (a) Committee guidance

The Committee shall each year provide general guidance to each Federal agency or department participating in the Program with respect to the preparation of requests for appropriations for activities related to the Program.

# (b) Submission of reports with agency appropriations requests

- (1) Working in conjunction with the Committee, each Federal agency or department involved in global change research shall include with its annual request for appropriations submitted to the President under section 1108 of title 31 a report which—
  - (A) identifies each element of the proposed global change research activities of the agency or department:
  - (B) specifies whether each element (i) contributes directly to the Program or (ii) con-

- tributes indirectly but in important ways to the Program; and
- (C) states the portion of its request for appropriations allocated to each element of the Program
- (2) Each agency or department that submits a report under paragraph (1) shall submit such report simultaneously to the Committee.

#### (c) Consideration in President's budget

- (1) The President shall, in a timely fashion, provide the Committee with an opportunity to review and comment on the budget estimate of each agency and department involved in global change research in the context of the Plan.
- (2) The President shall identify in each annual budget submitted to the Congress under section 1105 of title 31 those items in each agency's or department's annual budget which are elements of the Program.

(Pub. L. 101–606, title I, §105, Nov. 16, 1990, 104 Stat. 3100.)

#### § 2936. Scientific assessment

On a periodic basis (not less frequently than every 4 years), the Council, through the Committee, shall prepare and submit to the President and the Congress an assessment which—

- (1) integrates, evaluates, and interprets the findings of the Program and discusses the scientific uncertainties associated with such findings;
- (2) analyzes the effects of global change on the natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity; and
- (3) analyzes current trends in global change, both human-inducted <sup>1</sup> and natural, and projects major trends for the subsequent 25 to 100 years.

(Pub. L. 101–606, title I, §106, Nov. 16, 1990, 104 Stat. 3101.)

## § 2937. Omitted

## **Editorial Notes**

## CODIFICATION

Section, Pub. L. 101–606, title I, §107, Nov. 16, 1990, 104 Stat. 3101, which required the Chairman of the Federal Coordinating Council on Science, Engineering, and Technology to submit an annual report to Congress on the activities conducted by the Committee on Earth and Environmental Sciences pursuant to this subchapter, terminated effective May 15, 2000, pursuant to section 3003 of Pub. L. 104–66, as amended, set out as a note under section 1113 of Title 31, Money and Finance. See, also, page 157 of House Document No. 103–7.

## § 2938. Relation to other authorities

## (a) National Climate Program research activities

The President, the Chairman of the Council, and the Secretary of Commerce shall ensure that relevant research activities of the National Climate Program, established by the National Climate Program Act (15 U.S.C. 2901 et seq.), are

<sup>&</sup>lt;sup>1</sup> So in original. Probably should be "human-induced".