

appropriate, of representatives of Federal agencies, institutions of higher education, nongovernmental organizations, State organizations, industry, and international geoscience organizations to review the methodology and comments received under paragraph (1); and

(3) on completion of the review under paragraph (2), publish in the Federal Register the revised final methodology.

(e) Periodic updates

The methodology developed under this section shall be updated periodically (including at least once every 5 years) to incorporate new data as the data becomes available.

(f) National assessment

(1) In general

Not later than 2 years after the date of publication of the methodology under subsection (d)(1), the Secretary, in consultation with the Secretary of Energy and State geological surveys, shall complete a national assessment of capacity for carbon dioxide in accordance with the methodology.

(2) Geological verification

As part of the assessment under this subsection, the Secretary shall carry out a drilling program to supplement the geological data relevant to determining sequestration capacity of carbon dioxide in geological sequestration formations, including—

- (A) well log data;
- (B) core data; and
- (C) fluid sample data.

(3) Partnership with other drilling programs

As part of the drilling program under paragraph (2), the Secretary shall enter, as appropriate, into partnerships with other entities to collect and integrate data from other drilling programs relevant to the sequestration of carbon dioxide in geological formations.

(4) Incorporation into NatCarb

(A) In general

On completion of the assessment, the Secretary of Energy and the Secretary of the Interior shall incorporate the results of the assessment using—

- (i) the NatCarb database, to the maximum extent practicable; or
- (ii) a new database developed by the Secretary of Energy, as the Secretary of Energy determines to be necessary.

(B) Ranking

The database shall include the data necessary to rank potential sequestration sites for capacity and risk, across the United States, within each State, by formation, and within each basin.

(5) Report

Not later than 180 days after the date on which the assessment is completed, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Natural Resources of the House of Representatives a report describing the findings under the assessment.

(6) Periodic updates

The national assessment developed under this section shall be updated periodically (including at least once every 5 years) to support public and private sector decisionmaking.

(g) Authorization of appropriations

There is authorized to be appropriated to carry out this section \$30,000,000 for the period of fiscal years 2008 through 2012.

(Pub. L. 110-140, title VII, §711, Dec. 19, 2007, 121 Stat. 1710.)

§ 17272. Assessment of carbon sequestration and methane and nitrous oxide emissions from ecosystems

(a) Definitions

In this section:

(1) Adaptation strategy

The term “adaptation strategy” means a land use and management strategy that can be used—

- (A) to increase the sequestration capabilities of covered greenhouse gases of any ecosystem; or
- (B) to reduce the emissions of covered greenhouse gases from any ecosystem.

(2) Assessment

The term “assessment” means the national assessment authorized under subsection (b).

(3) Covered greenhouse gas

The term “covered greenhouse gas” means carbon dioxide, nitrous oxide, and methane gas.

(4) Ecosystem

The term “ecosystem” means any terrestrial, freshwater aquatic, or coastal ecosystem, including an estuary.

(5) Native plant species

The term “native plant species” means any noninvasive, naturally occurring plant species within an ecosystem.

(6) Secretary

The term “Secretary” means the Secretary of the Interior.

(b) Authorization of assessment

Not later than 2 years after the date on which the final methodology is published under subsection (f)(3)(D), the Secretary shall complete a national assessment of—

- (1) the quantity of carbon stored in and released from ecosystems, including from man-caused and natural fires; and
- (2) the annual flux of covered greenhouse gases in and out of ecosystems.

(c) Components

In conducting the assessment under subsection (b), the Secretary shall—

- (1) determine the processes that control the flux of covered greenhouse gases in and out of each ecosystem;
- (2) estimate the potential for increasing carbon sequestration in natural and managed ecosystems through management activities or restoration activities in each ecosystem;

(3) develop near-term and long-term adaptation strategies or mitigation strategies that can be employed—

- (A) to enhance the sequestration of carbon in each ecosystem;
- (B) to reduce emissions of covered greenhouse gases from ecosystems; and
- (C) to adapt to climate change; and

(4) estimate the annual carbon sequestration capacity of ecosystems under a range of policies in support of management activities to optimize sequestration.

(d) Use of native plant species

In developing restoration activities under subsection (c)(2) and management strategies and adaptation strategies under subsection (c)(3), the Secretary shall emphasize the use of native plant species (including mixtures of many native plant species) for sequestering covered greenhouse gas in each ecosystem.

(e) Consultation

(1) In general

In conducting the assessment under subsection (b) and developing the methodology under subsection (f), the Secretary shall consult with—

- (A) the Secretary of Energy;
- (B) the Secretary of Agriculture;
- (C) the Administrator of the Environmental Protection Agency;
- (D) the Secretary of Commerce, acting through the Under Secretary for Oceans and Atmosphere; and
- (E) the heads of other relevant agencies.

(2) Ocean and coastal ecosystems

In carrying out this section with respect to ocean and coastal ecosystems (including estuaries), the Secretary shall work jointly with the Secretary of Commerce, acting through the Under Secretary for Oceans and Atmosphere.

(f) Methodology

(1) In general

Not later than 1 year after December 19, 2007, the Secretary shall develop a methodology for conducting the assessment.

(2) Requirements

The methodology developed under paragraph (1)—

- (A) shall—
 - (i) determine the method for measuring, monitoring, and quantifying covered greenhouse gas emissions and reductions;
 - (ii) estimate the total capacity of each ecosystem to sequester carbon; and
 - (iii) estimate the ability of each ecosystem to reduce emissions of covered greenhouse gases through management practices; and
- (B) may employ economic and other systems models, analyses, and estimates, to be developed in consultation with each of the individuals described in subsection (e).

(3) External review and publication

On completion of a proposed methodology, the Secretary shall—

(A) publish the proposed methodology;

(B) at least 60 days before the date on which the final methodology is published, solicit comments from—

- (i) the public; and
- (ii) heads of affected Federal and State agencies;

(C) establish a panel to review the proposed methodology published under subparagraph (A) and any comments received under subparagraph (B), to be composed of members—

- (i) with expertise in the matters described in subsections (c) and (d); and
- (ii) that are, as appropriate, representatives of Federal agencies, institutions of higher education, nongovernmental organizations, State organizations, industry, and international organizations; and

(D) on completion of the review under subparagraph (C), publish in the Federal Register the revised final methodology.

(g) Estimate; review

The Secretary shall—

(1) based on the assessment, prescribe the data, information, and analysis needed to establish a scientifically sound estimate of the carbon sequestration capacity of relevant ecosystems; and

(2) not later than 180 days after the date on which the assessment is completed, submit to the heads of applicable Federal agencies and the appropriate committees of Congress a report that describes the results of the assessment.

(h) Data and report availability

On completion of the assessment, the Secretary shall incorporate the results of the assessment into a web-accessible database for public use.

(i) Authorization

There is authorized to be appropriated to carry out this section \$20,000,000 for the period of fiscal years 2008 through 2012.

(Pub. L. 110-140, title VII, §712, Dec. 19, 2007, 121 Stat. 1713.)

SUBCHAPTER VII—IMPROVED
MANAGEMENT OF ENERGY POLICY

PART A—MANAGEMENT IMPROVEMENTS

§ 17281. National media campaign

(a) In general

The Secretary, acting through the Assistant Secretary for Energy Efficiency and Renewable Energy (referred to in this section as the “Secretary”), shall develop and conduct a national media campaign—

(1) to increase energy efficiency throughout the economy of the United States during the 10-year period beginning on December 19, 2007;

(2) to promote the national security benefits associated with increased energy efficiency; and

(3) to decrease oil consumption in the United States during the 10-year period beginning on December 19, 2007.