

## **The Botanical Sciences and Native Plant Materials Research, Restoration and Promotion Act**

### **Title I: Promoting Botanical Research and Botanical Sciences Capacity**

**Section 1. Department of Interior Research.** -- Chapter 31 of Title 43 United States Code is amended by adding at the end thereof the following new Section:

“Section 1476 – Botanical Research. –

(a) In General – the Secretary, acting through the Bureau of Land Management, United States Geological Survey, Fish and Wildlife Service, National Park Service and such other agencies and instrumentalities as the Secretary determines appropriate, shall support a robust program of intramural and extramural botanical science research as relevant and appropriate to support the Department’s land management responsibilities.

(b) Areas of Emphasis – research conducted pursuant to this section shall include a focus on the following topics –

(1) effective approaches to restoring habitat damaged by wildfires that incorporate the use of appropriate plant materials;

(2) effective methods for developing and using locally adapted native plant materials in land management activities;

(3) effective mitigation strategies for combatting non-native, invasive plant species;

(4) mitigation strategies related to the impacts of long- and medium-term environmental changes such as changes in moisture levels, temperature and human activity;

(5) methods to promote the recovery of threatened and endangered species.

(c) Extramural Research. – As determined appropriate by the Secretary, research conducted under the authority of this section may be carried out through grants, contracts or cooperative agreements, provided that such awards are awarded on a competitive basis and otherwise adhere to all applicable requirements governing such activities.

(d) Authorization of Appropriations. – To carry out the purposes of this Section, there are authorized to be appropriated \$10 million in fiscal year 2017 and such sums as may be necessary in subsequent fiscal years.”

**Section 2 -- Department of Interior Botanical Science Capacity.** – Chapter 31 of Title 43 United States Code is amended by adding at the end thereof the following new Section:

“Section 1477 – Staff Enhancement –

(a) In General. – For the purpose of improving the Department’s land management capabilities, the Secretary is authorized to augment the Department’s expertise in the botanical sciences through the hiring of additional personnel with expertise in the botanical sciences and through a loan forgiveness program to facilitate the hiring of such personnel.

(b) Authorization. –

(1) the Secretary, subject to the availability of appropriations for such purpose, shall hire by not later than September 30, 2018 up to 20 full-time Botanical Science Personnel to support the Department’s land management responsibilities;

(2) Personnel hired pursuant to paragraph (1) shall be in addition to any positions authorized before the date of the enactment of this Act, and any existing vacancies within the Department on such date;

(3) The Secretary may waive any limitation on the number of full-time equivalent personnel assigned to the Department in order to carry out the purposes of this Section;

(4) The Secretary shall determine the appropriate placement of such personnel within the appropriate agencies of the Department with major land management responsibilities;

(5) Personnel hired pursuant to this Section shall be part of the Competitive Service and shall be hired in compliance with all applicable provisions of Title 5, United States Code.

(c) Loan Repayment Program. --

(1) In General. -- Secretary shall establish a program to provide educational loan repayment to qualifying individuals who agree to a term of employment with the Department as Botanical Science Personnel.

(2) Eligibility. -- To be eligible to participate in the loan repayment program, an individual must —

(A) either –

(I) have a degree in Botanical Sciences;

(II) be enrolled in an approved graduate training program in Botanical Sciences;

(III) be enrolled as a full-time student in an accredited educational institution, and in the final year of a course of a study or program, offered by such institution and approved by the Secretary, leading to a degree in botanical sciences;

(B) submit to the Secretary an application for a contract described in paragraph (4) of this subsection (relating to the payment by the Secretary of the educational loans of the individual in consideration of the individual serving for a period of obligated service).

(3) Information to be included with application and contract forms – In disseminating application forms and contract forms to individuals desiring to participate in the loan repayment program, the Secretary shall include with such forms a fair summary of the rights and liabilities of an individual whose application is approved (and whose contract is accepted). Such information shall be written in a manner calculated to be understood by the average individual applying to participate in the loan repayment program.

(4) Contracts. – An individual becomes a participant in the loan repayment program only upon the Secretary and the individual entering into a written contract whereby the Secretary agrees to pay on behalf of the individual loans in accordance with paragraph (5) of this subsection (subject to the availability of appropriated funds) and the individual agrees to accept loan payments on behalf of the individual and, if applicable, to maintain enrollment and acceptable academic standing in a course of study or training described in paragraph (2) of this subsection and to serve for a time period equal to 2 years or such longer period as the individual may agree to as a Botanical Scientist employed by the Department. Such contracts shall include all other necessary and appropriate terms and conditions to clarify the rights, obligations and liabilities of the parties.

(5) Repayment. –

(A) A loan repayment provided for an individual under a written contract under the repayment program authorized by this subsection shall consist of payment on behalf of the individual of the principal, interest, and related expenses on government and commercial loans received by the individual regarding the undergraduate or graduate education of the individual (or both), which loans were made for tuition, other reasonable educational expenses, or reasonable living expenses as determined by the Secretary.

(B) For each year of obligated service that an individual contracts to serve, the Secretary may pay up to \$50,000 (plus, beginning with fiscal year 2019, an amount determined by the Secretary on an annual basis to reflect inflation) on behalf of the individual for loans described in this paragraph. In making a determination of the amount to pay for a year of such service by an individual, the Secretary may enter into an agreement with the holder of any such loan for which payments are made to establish a schedule for the making of such payments.

(6) Employment ceiling. -- Notwithstanding any other provision of law, individuals who have entered into written contracts with the Secretary under this section, while undergoing academic or other training, shall not be counted against any employment ceiling affecting the Department.

(d) Definition. – the term “Botanical Science Personnel” means individuals with post-secondary education in the field of botany, including Bachelor’s Degrees in plant biology.

(e) Authorization of Appropriations -- To carry out the purposes of this Section, there are authorized to be appropriated \$3 million for subsection (b) and \$1 million for subsection (c) in fiscal year 2017 and such sums as may be necessary in subsequent fiscal years.

## **Title II: Generating Demand For Native Plant Materials**

### **Section 1. – Use by Federal Agencies of Native Plant Materials. --**

**(a) Department of Interior.** -- Chapter 31 of Title 43 United States Code is amended by adding at the end thereof the following new Section –

“Section 1378. – Policy Respecting Native Plant Materials. –

(a) In General. – in undertaking land management activities within the purview of the Department -- including maintenance and restoration in response to degradation caused by human activity or natural events (such as fire, flood or infestation) – it is the policy of the United States that preference shall be made for the use of locally-adapted native plant materials in such activities.

(b) Implementation. – the Secretary shall implement the policy established by this Section with respect to the Agencies of the Department with significant land use responsibilities through appropriate administrative actions and shall specifically identify situations in which the use of non-native, non-locally adapted native plant materials may be warranted as including situations where –

(1) Emergency conditions require the protection of basic resource values;

(2) An interim, non-persistent measure is needed to aid in the re-establishment of native species;

(3) native plant materials are not available;

(4) the plant community has been permanently altered.

**(b) Department of Agriculture** – SubPart 1 of Title 16 United States Code is amended by adding at the end thereof the following new Section –

“Section 540. – Policy Respecting Native Plant Materials. –

(a) In General. – in undertaking land management activities within the purview of the Department pertaining to federal lands -- including maintenance and restoration in response to degradation caused by human activity or natural events (such as fire, flood or infestation) – it is the policy of the United States that preference shall be made for the use of locally-adapted native plant materials in such activities.

(b) Implementation. – the Secretary, acting through the Chief of the U.S. Forest Service, shall implement the policy established by this Section through appropriate administrative actions and shall specifically identify situations in which the use of non-native, non-locally adapted native plant materials may be warranted as including situations where –

(1) Emergency conditions require the protection of basic resource values;

(2) An interim, non-persistent measure is needed to aid in the re-establishment of native species;

(3) native plant materials are not available;

(4) the plant community has been permanently altered.

**(c) Department of Defense**. – Chapter 159 of Title 10 United States Code is amended by adding at the end thereof the following new Section –

“Section 2698. – Policy Respecting Native Plant Materials. –

(a) In General. – in undertaking land management activities within the purview of the Department -- including maintenance and restoration of land (and including restoration of land used by permit or lease, and conservation and cultural activities pursuant to Sections 2691 and 2694 of this Chapter) -- it is the policy of the United States that preference shall be made for the use of locally-adapted native plant materials in such activities.

(b) Implementation. – the Secretary, acting through the UnderSecretary for Installations shall implement the policy established by this Section through appropriate administrative actions and shall specifically define situations in which the use of non-native, non-locally adapted native plant materials may be warranted. as including situations where –

(1) Emergency conditions require the protection of basic resource values;

(2) An interim, non-persistent measure is needed to aid in the re-establishment of native species;

(3) native plant materials are not available;

(4) the plant community has been permanently altered

(c) Consultation. – The Secretary shall consult with the Secretaries of Interior and Agriculture regarding implementation of this Section.

(d) Definition. – for purposes of this Section, the term “native plant materials” means indigenous terrestrial and aquatic plant species that evolved naturally in a defined native ecosystem.

**Section 2. – Use of Native Plant Materials in Surface Transportation Program. --** Section 329 of Title 23 is amended by inserting at the end thereof the following new Subsection –

“(d) Native Plant Materials –

(1) In carrying out environmental mitigation efforts and environmental restoration and pollution abatement activities as authorized by paragraphs (14) and (17) of subsection 133(b) of this Title, states shall, to the extent practicable, maximize the use of locally-adapted native plant materials in such mitigation and restoration activities;

(2) The Secretary shall ensure State compliance with this requirement as part of the process of reviewing and approving annual State project agreements pursuant to Subsection 133(e);

(3) The Secretary shall consult with the Secretaries of Interior and Agriculture regarding the implementation of this requirement.

**Section 3. – Federal Buildings. –** Title 42, United States Code is amended by adding the following new Section –

Sec. 17094A. – Native Plant Materials Requirements for Federal Development Projects.

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The sponsor of any development or redevelopment project involving a Federal facility with a footprint that exceeds 5,000 square feet shall use site planning, design, construction, and maintenance strategies for the property to establish, maintain or restore, to the maximum extent technically feasible, the use of locally-adapted native plant materials on all natural spaces including, where feasible, roofs and other appropriate portions of the structure.

### **Title III – Authorization of Federal Native Plant Materials-Related Activities**

#### **Section 1. – Interagency Efforts -- \_\_\_\_ is amended by including the following new Section --**

Sec. \_\_\_\_ . Interagency Plant Materials Efforts. –

(a) In General. – Appropriations are hereby authorized for the collaborative activities of multiple agencies with land use responsibility to undertake activities related to native plant materials.

(b) Activities. – The following activities are within the scope of this authority –

(1) Seed-related activities –

(I) Identify seed needs and ensure the reliable availability of genetically appropriate seed;

(II) Conduct research to develop genetically appropriate seed and to improve technology for seed production and ecological restoration;

(III) Support land managers ability to make timely and informed seeding decisions for ecological restoration;

• (2) Pollinator-related activities – efforts to enhance, protect and restore plant materials necessary to support pollinators and dispersers;

(3) Land Management-related activities – efforts to coordinate activities aimed at sustaining and restoring public lands through the use of techniques and materials that promote to the extent practicable the use of locally-adapted native species;

(c) Agencies. – The following Departments and agencies are included within the scope of this authority –

(1) the Secretary of the United States Department of Interior and the following agencies–

- (I) Bureau of Indian Affairs;
- (II) Bureau of Land Management;
- (III) National Park Service;
- (IV) U.S. Fish and Wildlife Service;
- (V) U.S. Geological Survey.

(2) the Secretary of Agriculture and the following agencies –

- (I) Agricultural Research Service;
- (II) U.S. Forest Service;
- (III) National Institute of Food and Agriculture;
- (IV) Natural Resources Conservation Service.

(3) The United States Botanic Garden;

(4) The Smithsonian Institution;

(5) the Secretary of Transportation and the Federal Highway Administration.

(d) Authorization of Appropriations -- To carry out the purposes of this Section, there are authorized to be appropriated \$70 million in fiscal year 2017 and such sums as may be necessary in subsequent fiscal years.

**Section 2. – Plant Conservation Program – Chapter 1 of Title 43 United States Code is hereby amended by adding at the end thereof the following new Section –**

Sec. 26. Plant Conservation Program. –

(a) In General. – The Bureau of Land Management is authorized to undertake activities to develop and utilize native plant materials.

(b) Activities. – The following activities are within the scope of this authority –

(1) identifying, evaluating and protecting rare plants on public lands;

(2) understanding the effects of climate change on native plant species and communities on public lands;

(3) supporting efforts to develop genetically appropriate native plant materials for restoring and maintaining habitat for animal and plant species, including sage grouse, and monitor the effectiveness of such materials;



- (4) ensure that the needs of the agency for native plant materials are met;
- (5) develop seed transfer zones and guidelines;
- (6) support public-private partnerships to catalogue and store plant materials;
- (7) coordinate a national network of seed storage warehouses;
- (8) implement habitat conservation and restoration on a landscape scale;
- (9) support public-private efforts, and volunteer efforts to support plant conservation.

(c) Authorization of Appropriations -- To carry out the purposes of this Section, there are authorized to be appropriated \$35 million for fiscal year 2017 and such sums as may be necessary in subsequent fiscal years.

**Section 3: National Wildlife Foundation Grant Programs in support of Native Plants -- Chapter 57 of Title 16 United States Code is amended by adding at the end thereof the following new Section --**

Section 3711. Plant Conservation Programs.

(a) In General -- The Foundation shall support a robust program of activities specifically focused on the conservation and protection of native plants.

(b) The Foundation will provide a report to Congress on its implementation of this Section.

**Section 4: Grants to support Collaborative Efforts to Prevent Endangered Species Status. The Fish and Wildlife Act of 1956 (16 USC Section 742a - 742j) is amended by adding at the end thereof the following new Subsection --**

(k) Threatened and Endangered Plants --

(a) In General -- The Department of Interior, acting through the Fish and Wildlife Service, shall support a program of collaborative grants to support efforts to prevent rare plant species from becoming endangered and to encourage the recovery of endangered plant species.

(b) Preference shall be given to projects that involve collaborations between State and local units of government working in collaboration with non-profit organizations with knowledge and experience in rare and endangered plant restoration issues.

(c) Awards pursuant to this section shall be competitively awarded in compliance with fully transparent procedures.

(d) Authorization of Appropriations. -- To carry out the provisions of this Section, there are authorized to be appropriated \$54 million for fiscal year 2017 and such sums as may be necessary in subsequent fiscal years.

Discussion Draft