114TH CONGRESS
2D SESSION

H. R. _____

To promote botanical research and botanical sciences capacity, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. QUIGLEY introduced the following bill; which was referred to the Committee on ________________________________

A BILL

To promote botanical research and botanical sciences capacity, and for other purposes.

1 Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

2 SECTION 1. SHORT TITLE.

3 This Act may be cited as the “Botanical Sciences and Native Plant Materials Research, Restoration, and Promotion Act”.

4 SEC. 2. TABLE OF CONTENTS.

5 The table of contents for this Act is as follows:

Sec. 1. Short title.
Sec. 2. Table of contents.
SEC. 3. DEFINITIONS.

As used in this Act, the following terms have the following meanings:

(1) **INVASIVE PLANT SPECIES.**—The term “invasive plant species” means a plant species that is nonnative with respect to an ecosystem and whose introduction into that ecosystem will cause, or is likely to cause, economic harm, environmental harm, or harm to human, animal, or plant health.

(2) **LOCALLY ADAPTED.**—The term “locally adapted” with respect to plants, means plants that originate from an area that is geographically proximate to a planting area and that are environ-
mentally adapted to, and likely to succeed in becoming established and persisting within, such area.

(3) NATIVE PLANT SPECIES.—The term “native plant species” means indigenous terrestrial and aquatic plant species that evolved naturally in a defined native ecosystem.

(4) NONNATIVE PLANT SPECIES.—The term “nonnative plant species” means a plant that has been introduced by humans to a location outside its native or natural range and may, depending on relevant facts and circumstances, include a species introduced from another continent, ecosystem, seed zone, or habitat within an ecosystem.

(5) PLANT MATERIALS.—The term “plant materials” includes, with respect to a native plant species or a nonnative plant species, such a plant or its seeds, eggs, spores, or other biological material capable of propagating that species.

TITLE I—PROMOTING BOTANICAL RESEARCH AND BOTANICAL SCIENCES CAPACITY

SEC. 101. DEPARTMENT OF THE INTERIOR BOTANICAL RESEARCH.

(a) IN GENERAL.—The Secretary of the Interior, acting through the Bureau of Land Management, United
States Geological Survey, United States 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 combating invasive plant species.

(4) Mitigation strategies related to the impacts of long- and medium-term environmental changes such as changes in moisture levels, temperature, landscape fragmentation, nonnative animal and plant species, 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 this section may be carried out through competitively awarded grants or contracts, or cooperative agreements, awarded in accordance with all applicable requirements governing such activities.

(d) Authorization of Appropriations.—To carry out the purposes of this section, there are authorized to be appropriated $10,000,000 for fiscal year 2018, and such sums as may be necessary in subsequent fiscal years.

SEC. 102. STAFF ENHANCEMENT.

(a) In General.—For the purpose of improving the Department’s land management capabilities, the Secretary of the Interior is authorized to augment the expertise of the Department of the Interior in the botanical sciences by—

(1) hiring additional personnel with expertise in the botanical sciences; and

(2) establishing a loan forgiveness program to facilitate the hiring of such personnel.

(b) Authorization.—

(1) Subject to the availability of appropriations for such purpose, by not later than September 30, 2019, the Secretary shall hire not more than 20 full-time Botanical Science Personnel to support the De-
department’s land management responsibilities. The Secretary shall determine the appropriate placement of such personnel within the appropriate agencies of the Department with major land management responsibilities. The Secretary may waive any limitation on the number of full-time equivalent personnel assigned to the Department and its constituent agencies in order to carry out the purposes of this section.

(2) Personnel hired pursuant to paragraph (1) shall be—

(A) 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;

(B) part of the Competitive Service; and

(C) hired in compliance with all applicable provisions of title 5, United States Code.

(c) LOAN REPAYMENT PROGRAM.—

(1) IN GENERAL.—The 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 under this sub-
section, an individual shall—

(A) either—

(i) have a degree in botanical sciences;

(ii) be enrolled in an approved graduate training program in botanical sciences; or

(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; and

(B) submit to the Secretary an application for a contract described in paragraph (4).

(3) INFORMATION TO BE INCLUDED WITH APPLICATION AND CONTRACT FORMS.—In dissemi-
nating 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.—

(A) IN GENERAL.—An individual becomes
a participant in the loan repayment program
only upon the Secretary and the individual en-
tering into a written contract whereby—

(i) the Secretary agrees to pay on be-
half of the individual loans in accordance
with paragraph (5), subject to the avail-
ability of appropriated funds; and

(ii) the individual agrees to—

(I) accept loan payments on be-
half of the individual; and

(II) if applicable, maintain enroll-
ment and acceptable academic stand-
ing in a course of study or training
described in paragraph (2) and 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.

(B) OTHER TERMS AND CONDITIONS.—

Such contracts shall include all other necessary
and appropriate terms and conditions to clarify
the rights, obligations, and liabilities of the par-
ties.

(5) Repayment.—

(A) In general.—A loan repayment pro-
vided for an individual under a written contract
under the repayment program authorized by
this subsection shall consist of payment on be-
half of the individual of the principal, interest,
and related expenses on government and com-
mercial loans received by the individual regard-
ing the undergraduate or graduate education of
the individual (or both), which loans were made
for tuition, other reasonable educational ex-
penses, or reasonable living expenses, as deter-
dined by the Secretary.

(B) Amounts.—For each year of obligated
service that an individual contracts to serve, the
Secretary may pay up to $50,000 (plus, begin-
ning with fiscal year 2019, an amount deter-
mined 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.—For the purposes of this section, the term “Botanical Science Personnel” means individuals with post-secondary education in the field of botany, including plant ecologists and individuals with a bachelor’s degree in plant biology.

(e) AUTHORIZATION OF APPROPRIATIONS.—To carry out the purposes of this section, there are authorized to be appropriated—

(1) for fiscal year 2018—

(A) $3,000,000 for subsection (b); and

(B) $1,000,000 for subsection (e); and

(2) for each fiscal year after fiscal year 2018, such sums as may be necessary.
TITLE II—GENERATING DEMAND
FOR NATIVE PLANT MATERIALS

SEC. 201. POLICY FOR USE OF LOCALLY ADAPTED NATIVE
PLANT MATERIALS BY DEPARTMENT OF AGRICULTURE AND DEPARTMENT OF THE INTERIOR.

(a) POLICY.—In undertaking a land management activity on Federal lands under the jurisdiction of the Department of Agriculture or the Department of the Interior, 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 to the extent practicable for the use of locally adapted native plant materials.

(b) IMPLEMENTATION.—The Secretary of Agriculture, acting through the Chief of the Forest Service, and the Secretary of the Interior, acting through the heads of land management agencies of the Department of the Interiors, shall—

(1) implement the policy established by subsection (a) through appropriate administrative actions; and
specifically identify situations in which the use of nonnative plant materials may be warranted, including situations in which—

(A) emergency conditions require the protection of basic resource values;

(B) an interim, nonpersistent measure is needed to aid in the reestablishment of native plant species;

(C) native plant materials are not reasonably available; or

(D) the plant community subject to the land management activity has been permanently altered.

SEC. 202. POLICY FOR USE OF LOCALLY ADAPTED NATIVE PLANT MATERIALS BY DEPARTMENT OF DEFENSE.

(a) POLICY.—Chapter 159 of title 10, United States Code, is amended by inserting after section 2692 the following:

“§ 2693. Policy for use of locally adapted native plant materials in management of Department of Defense lands

“(a) POLICY.—In undertaking a land management activity on land under the jurisdiction of the Department of Defense, including land withdrawn for or held by permit
or lease, it is the policy of the United States that preference to the extent practicable shall be made for the use of locally adapted native plant materials.

“(b) IMPLEMENTATION.—The Secretary of Defense, acting through the Under Secretary for Installations, shall—

“(1) implement the policy established by subsection (a) through appropriate administrative actions; and

“(2) specifically identify situations in which the use of nonnative plant materials may be warranted, including situations in which—

“(A) emergency conditions require the protection of basic resource values;

“(B) an interim, nonpersistent measure is needed to aid in the reestablishment of native plant species;

“(C) native plant materials are not reasonably available; or

“(D) the plant community subject to the land management activity has been permanently altered.

“(b) CONSULTATION.—The Secretary of Defense shall consult with the Secretary of the Interior and the
Secretary of Agriculture regarding implementation of this section.

“(c) DEFINITIONS.—In this section:

“(1) LAND MANAGEMENT ACTIVITY.—The term ‘land management activity’ includes—

“(A) maintenance and restoration; and

“(B) conservation and cultural activities pursuant to sections 2691 and 2694 of this title.

“(2) LOCALLY ADAPTED.—The term ‘locally adapted’ with respect to plants, means plants that originate from an area that is geographically proximate to a planting area and that are environmentally adapted to, and likely to succeed in becoming established and persisting within, such area.

“(3) NATIVE PLANT SPECIES.—The term ‘native plant species’ means indigenous terrestrial and aquatic plant species that evolved naturally in a defined native ecosystem.

“(4) NONNATIVE PLANT SPECIES.—The term ‘nonnative plant species’ means a plant that has been introduced by humans to a location outside its native or natural range and may, depending on relevant facts and circumstances, include a species in-
introduced from another continent, ecosystem, seed zone, or habitat within an ecosystem.

“(5) PLANT MATERIALS.—The term ‘plant materials’ includes, with respect to a native plant species or a nonnative plant species, such a plant or its seeds, eggs, spores, or other biological material capable of propagating that species.”.

(b) CLERICAL AMENDMENT.—The table of sections at the beginning of chapter 159 of title 10, United States Code, is amended by inserting after the item relating to section 2692 the following:

“2693. Policy for use of locally adapted native plant materials in management of Department of Defense lands.”.

SEC. 203. SURFACE TRANSPORTATION PROGRAM.

Section 329 of title 23, United States Code, is amended by adding at the end the following:

“(d) NATIVE PLANT MATERIALS.—

“(1) IN GENERAL.—In carrying out environmental mitigation efforts and environmental restoration and pollution abatement activities as authorized by section 133(b), a State shall, to the extent practical, maximize the use of locally adapted native plant materials.

“(2) CONSULTATION.—The Secretary shall consult with the Secretary of the Interior and the Sec-
retary of Agriculture regarding the implementation of this subsection.”.

SEC. 204. NATIVE PLANT MATERIALS REQUIREMENTS FOR FEDERAL DEVELOPMENT PROJECTS.

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

SEC. 301. INTERAGENCY PLANT MATERIALS EFFORTS.

(a) Activities.—The heads of the agencies shall collaborate, as appropriate, regarding land use responsibility to undertake the following activities related to native plant materials:

(1) Identify seed needs and ensure the reliable availability of genetically appropriate seed.
(2) Conduct research to develop genetically appropriate seed and to improve technology for seed production and ecological restoration.

(3) Support land managers’ ability to make timely and informed seeding decisions for ecological restoration.

(4) Efforts to enhance, protect, and restore plant materials necessary to support pollinators and dispersers.

(5) 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 plant materials.

(b) AGENCIES.—For the purposes of this section, the term “agencies” means the following:

(1) In the Department of the Interior:
(A) Bureau of Indian Affairs.
(B) Bureau of Land Management.
(C) National Park Service.
(D) United States Fish and Wildlife Service.
(E) United States Geological Survey.

(2) In the Department of Agriculture:
(A) Agricultural Research Service.
(B) Forest Service.

(C) National Institute of Food and Agriculture.

(D) Natural Resources Conservation Service.

(3) United States Botanic Garden.

(4) Smithsonian Institution.

(5) Federal Highway Administration.

SEC. 302. BUREAU OF LAND MANAGEMENT PLANT CONSERVATION PROGRAM.

(a) IN GENERAL.—The Bureau of Land Management is authorized to undertake activities to develop and use 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 human activity 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 monitoring the effectiveness of such materials.
(4) Ensuring that the needs of the agency for native plant materials are met.

(5) Developing seed transfer zones and guidelines.

(6) Supporting public-private partnerships to catalogue and store plant materials.

(7) Coordinating a national network of seed storage warehouses.

(8) Implementing habitat conservation and restoration on a landscape scale.

(9) Supporting public-private efforts, and volunteer efforts to support plant conservation.

(e) AUTHORIZATION OF APPROPRIATIONS.—To carry out the purposes of this section, there are authorized to be appropriated—

(1) for fiscal year 2018, $35,000,000; and

(2) for each fiscal year after fiscal year 2018, such sums as may be necessary.

SEC. 303. NATIONAL FISH AND WILDLIFE FOUNDATION PLANT CONSERVATION PROGRAMS.

The National Fish and Wildlife Foundation shall—

(1) ensure that a robust program of activities specifically focused on the conservation and protection of native plants is incorporated into its existing programs and activities; and
(2) provide a report to Congress on its implementation of this section.

SEC. 304. GRANTS TO SUPPORT COLLABORATIVE EFFORTS TO PREVENT ENDANGERED SPECIES STATUS.

The Fish and Wildlife Act of 1956 (16 U.S.C. 742a et seq.) is amended by adding at the end the following new section:

“SEC. 13. THREATENED AND ENDANGERED PLANTS.

“(a) In General.—The Secretary of the Interior, acting through the United States Fish and Wildlife Service, shall support a program of collaborative grants to support efforts to prevent rare plant species from becoming endangered species and to encourage the recovery of endangered plant species. Awards pursuant to this section shall be made competitively in compliance with fully transparent procedures.

“(b) Preference.—Preference shall be given under this section to projects that involve collaborations between Federal, State, and local units of government working in collaboration with nonprofit organizations with knowledge and experience in rare and endangered plant restoration issues.

“(c) Authorization of Appropriations.—To carry out the provisions of this section, there are authorized to be appropriated—
“(1) $54,000,000 for fiscal year 2018; and

“(2) such sums as may be necessary for fiscal years after fiscal year 2018.”.