

# **America's Revegetation and Carbon Sequestration (ARCs) Act of 2021**

## ***Section-By-Section***

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### **Section 1. Short Title; Table of Contents.**

Section 1 states the short title of the bill as the “America’s Revegetation and Carbon Sequestration (ARCs) Act of 2021”. This section also includes the table of contents.

### **Section 2. Findings.**

Section 2 contains Congressional findings.

### **Section 3. Definitions of National Forest System.**

Section 3 defines the terms “National Forest System” and “carbon sequestration” for the purposes of Act, and contains definitions relating to the Secretaries of Agriculture and of the Interior.

## **TITLE I—REVEGETATION**

### **Section 101. Climate Adaptation and Resilient Forests and Rangelands Measures.**

Section 101 directs the Department of the Interior and the Forest Service to consider resiliency and adaptation factors when undertaking revegetation efforts, especially in selecting species for planting. For example, this section would require that when planting tree, shrub, or plant species, localized ecological conditions, climate resiliency, and disease-resistance be taken into account.

### **Section 102. National Revegetation Effort.**

Section 102 establishes a regionally-based, national revegetation effort to be led by the Department of the Interior and the Forest Service, and carried out in coordination with non-Federal partners.

Specifically, this section requires the Department of the Interior and the Forest Service to jointly develop an objective tool to assess revegetation need, and to use that tool to assess the number of acres on Federal land in need of revegetation. Further, the Secretaries are authorized to partner with non-Federal entities, including Indian Tribes, to assess opportunities to restore forest and rangeland cover across non-Federal land. The Secretaries are required to publish a report describing the number of acres of land in need of revegetation, and the approximate location of such land.

This section further requires the Department of the Interior and the Forest Service to establish within 18 months a revegetation task force (comprised of Federal agencies and non-Federal partners) for each region of the U.S. In the following 6 months, each task force will develop a

10-year comprehensive revegetation strategy and implementation plan, and upon its completion, will implement the plan. Any implementation on non-federal land is to be carried out only on a voluntary basis, and in cooperation with the landowner. To ensure adequate nursery capacity, this section also directs task forces to assess nursery inventory relative to revegetation needs, and to develop a plan to increase nursery capacity to fulfill estimated revegetation needs. Similarly, this section requires the task force to assess capacity to collect and store seed, and to develop a plan for increasing seed capacity if necessary.

Lastly, this section requires the Department of the Interior and the Forest Service to submit an annual report detailing accomplishments of and implementation barriers to the national revegetation effort established by this section.

In implementing this section, the Secretaries are to avoid duplicative efforts, maximize voluntary non-Federal involvement, and avoid using personnel who would otherwise be engaged in forest management or wildfire mitigation efforts.

### **Section 103. Experimental Forests.**

Section 103 formally authorizes the existing network of experimental forests currently operated by the Forest Service. Specifically, it requires the Forest Service to continue to operate an experimental forest for each forest type that occurs in the United States. Additionally, this section directs the Forest Service to conduct additional climate resiliency research within the network, and requires all data and research findings developed from projects undertaken on the network to be made available to the public.

### **Section 104. Long-term Contracts for Tree and Seed Planting.**

Section 104 extends the current 5-year contract authority for tree and seed planting crews to 10 years, allowing for long-term certainty for local businesses in revegetation efforts.

### **Section 105. Tree Planting for Communities.**

Section 105 expands the scope of the Job Corps program to include tree planting and maintenance within its job skill curriculum. Established in 1964 and administered by the United States Department of Labor, the Jobs Corps offers free education and vocational training to young men and women. This section also directs the Secretary of Energy to establish a utility cost-share grant program whereby grants are awarded for tree planting activities that will reduce residential energy consumption. In awarding grants, the Secretary is to prioritize projects that would provide the largest potential reduction in residential energy consumption for households, as well as prioritize socioeconomically disadvantaged neighborhoods for projects in urban areas utilizing a new tool called a Tree Equity Score, and to ensure equitable geographic balance between cities where grants are awarded. The Federal cost share for such projects shall not be more than 50 percent, which may be raised in certain instances on a case-by-case basis.

## **Section 106. Revegetation on Abandoned Mine Land**

Section 106 establish a pilot program to support revegetation efforts on abandoned mine lands. In coordination with the Forest Service, the Department of the Interior would revegetate Federal mined land; offer financial assistance to States to revegetate State mined land; offer financial assistance to Tribes to revegetate Tribal mined land; and revegetate or offer financial assistance to States or other entities to revegetate eligible private mined land. The Secretary is prohibited from providing assistance to any person or entity with an ongoing legal obligation to revegetate mined land. This section outlines the requirements for mined land to be eligible under this section as well as eligible project activities (e.g., site preparation) and planting preferences. The program will be terminated after eight years, and the Department is required to submit a report to Congress describing the accomplishments of the program.

## **Section 107. International Reforestation.**

Section 107 allows the Forest Service to provide technical assistance for tree planting to other countries, upon receiving a request for assistance. The Secretary may also enter into partnerships with nongovernmental entities located outside the United States, or in United States and operating internationally, to engage in activities that restore vegetation and promote and improve global carbon sequestration through revegetation activities.

## **TITLE II—CARBON SEQUESTRATION THROUGH FOREST MANAGEMENT AND INNOVATION**

## **Section 201. Forest Management from Carbon Credits.**

Section 201 directs the Forest Service to collaborate with the National Forest Foundation to create a workable investment methodology whereby the National Forest Foundation is to manage transactions that allow non-Federal entities to claim carbon credits in voluntary carbon markets in exchange for funds to be used by the Forest Service to contract and implement projects designed to increase carbon sequestration or avoid carbon emissions on National Forest System lands. The intent of this section is to establish a non-federal funding stream for mechanical thinning in forests that are at very high risk from wildfires and to establish a consistent way of tracking their carbon impacts (specifically, to the extent they reduce wildfire risk and thereby prevent emissions), expedite the sequestering of carbon, and store additional carbon in harvested wood products. Thinning projects also help build healthier forests that are more resistant to insect infestations, disease outbreaks, fire, and drought.

This section stipulates that funds received in exchange for carbon credits may be used without further appropriation or fiscal year limitation, and that such funds are to supplement (and not supplant) any other funds made available for active forest management projects. The National Forest Foundation may work with other entities to design, manage, account for, or implement projects. This section requires the Forest Service, in collaboration with the National Forest Foundation, to submit an annual report to Congress describing the status of the program.

## **Section 202. Recovery and Restoration Treatments Following Stand-Replacing Disturbances**

The intent of this section is to require the Forest Service to be better prepared by initiating proactive planning efforts and public engagement, to address what management activities should occur following large, stand-replacing wildfires or other disturbance events. The intent of this section is to ensure emergency preparedness and management responsiveness for at-risk forests, promote public involvement and agency coordination in decision-making ahead of time, and to avoid delays that pre-empt replanting activities, hazard tree removal, and economic recovery via salvage logging.

This section requires the Forest Service to identify National Forests that are at high or very high-risk of experiencing high-tree mortality disturbance events (*e.g.*, hurricanes, certain wildfires), to develop a model land management plan amendment describing how the Forest Service will respond on a given National Forest if one of these disturbance events occurs, and to amend the land management plans of those identified forests. The plan amendments shall include direction regarding post-disturbance management, including salvage logging and reforestation activities. Plan development is to be assisted by interdisciplinary post-disturbance planning teams established by the Forest Service. Within 10 years, the applicable National Forests will amend their applicable land management plan to incorporate the developed under this section.

## **Section 203. Biochar and Wood Waste**

Section 204 directs the Food and Drug Administration, in consultation with USDA and in coordination with the States, to establish a pilot program for feeding biochar to livestock (expanding upon the successful pilot program conducted by the Nebraska Forest Service and Kansas Forest Service). Further, this section directs the United States Geological Survey, in coordination with any relevant non-Federal entities, to conduct a study to develop and publish a national commercialization plan for the production, sale, and use of biochar as a soil amendment for plant growth improvement.

## **Section 204. Eradication of Invasive Grasses.**

Section 205 directs the Bureau of Land Management, the United States Geological Survey, and the Forest Service, to coordinate in the development and implementation of a comprehensive five-year action plan to map and treat invasive grasses, including cheatgrass. The Secretaries are required to finalize the action plan within 180 days and to begin implementation of the action plan 60 days thereafter.

This section requires the action plan to take into account the best available science; to incorporate existing efforts; to engage with State and local government entities, other Federal agencies, and local agencies; to identify high-priority target treatment and control areas; to establish specific implementation actions and goals; to provide for a number of treatment types; and to outline post-treatment guidelines for replanting native grasses and seeds, as well as monitoring for the presence of new invasive grasses.

This section requires the Federal agencies to submit an annual report to Congress assessing the implementation of the action plan. This section authorizes \$30 million for development and implementation of action plans.

## TITLE III—MASS TIMBER

### **Section 301. Definitions**

Section 301 contains definitions for certain terms used within this title, and clarifies that cross-laminated timber is one type of mass timber.

### **Section 302. Joint Mass Timber Science and Education Program**

Section 302 directs the Forest Products Laboratory of the Forest Service to establish a mass timber science and education program to respond to the emerging needs of architects, developers, and the forest products industry, and to work closely with higher-education research programs in administering the program. This section requires the Secretary of Agriculture to appoint a stakeholder advisory group, who shall meet at least annually to consider needs, make suggestions, and assist the Secretary in drafting a mass timber research plan to be proposed to Congress. Furthermore, this section authorizes the Forest Products Lab to provide assistance to the Secretary of Transportation and to States related to the construction of wood bridges. This section authorizes \$4 million from existing amounts to carry out authorized activities.

### **Section 303. Storing Carbon in Federal Buildings.**

Section 303 directs the Department of the Interior and the Forest Service to develop and maintain a running database of its mass timber buildings, and to collect data on the embodied carbon stored in the construction of buildings included in the database. This section directs the Department of the Interior and the Forest Service to prepare a plan to increase the amount of carbon stored in its buildings in a manner that is material neutral, and to submit that plan to Congress.

Further, this section directs the Department of the Interior and the Forest Service to procure certain mass timber structures if feasible.

## TITLE IV—RESEARCH

### **Section 401. Longevity of Forest Products.**

Section 401 directs the Department of Energy, in coordination with USDA, to develop more accurate and efficient methods and technologies to measure and monitor the amount and average lifespan of carbon stored in woody biomass energy feedstocks and building materials, and to publish US carbon estimates for these sectors based on these methods.

## **Section 402. Forest Inventory and Analysis**

Section 402 directs the Forest Service to continue to incorporate remote sensing technologies in its Forest Inventory & Analysis program and to assess regional-scale net carbon stocking in a manner that can enable policy makers to compare the consequences of different forest policy options with regards to climate and carbon sequestration and storage.

## **Section 403. Bioeconomy Research**

Section 403 directs the Forest Products Laboratory of the Forest Service to expand its ongoing research relating to the use of wood in order to facilitate the establishment of new markets, including non-traditional markets for material produced from forest management projects that typically has little or no commercial value.

## **Section 404. Insurance Product to Replace Buffers.**

Section 404 gives the Forest Service the authority to establish an intragovernmental revolving fund to maintain adequate buffer reserves for a project implementing a forest carbon activity under section 201, in the event there is a need to cover unforeseen losses in carbon stocks.

## **Section 405. Forest Health Threat Centers.**

Section 405 directs the Forest Service to seek to expand the services provided by the Western Environmental Threat Assessment Center and Eastern Environmental Threat Assessment Center such that they become centers of excellence to inform large-scale climate resilient forest management, and share the syntheses, models, and application tools developed by the Western Environmental Threat Assessment Center and Eastern Environmental Threat Assessment Center with the USDA Climate Hubs and the Climate Adaptation Science Centers managed by the US Geological Survey.