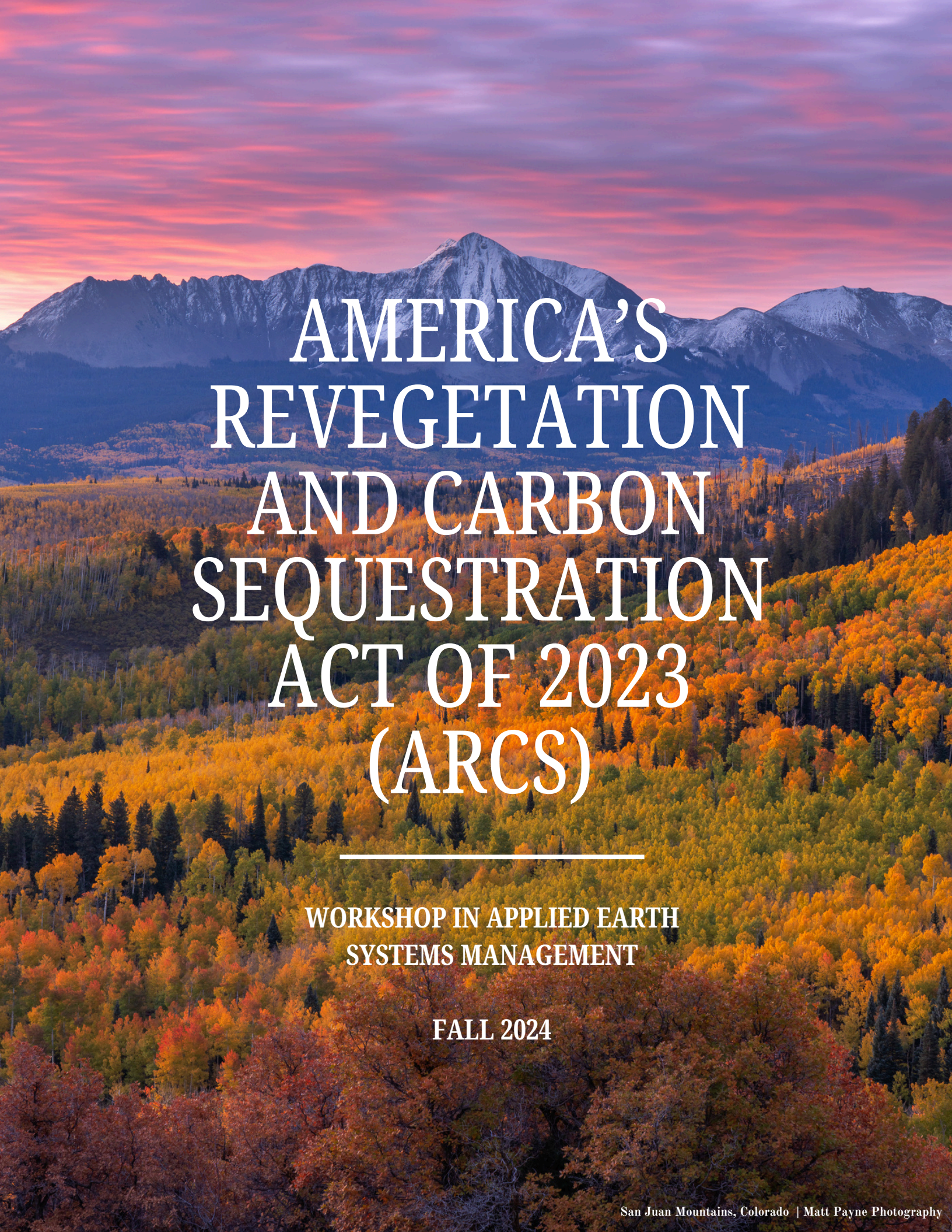




AMERICA'S REVEGETATION AND CARBON SEQUESTRATION ACT OF 2023 (ARCS)

WORKSHOP IN APPLIED EARTH
SYSTEMS MANAGEMENT

FALL 2024

1 | EXECUTIVE SUMMARY

America's Revegetation and Carbon Sequestration (ARCS) Act of 2023 aims to address the critical environmental problem of deforestation and forest degradation in the United States through comprehensive forest management. Revegetation will sequester carbon dioxide and help mitigate climate change. This report details the design and planning for two major provisions of this bill: the national revegetation strategy (Title I, Section 102) and plans for recovery after stand-replacing disturbances (Title II, Section 202). In particular, the report outlines the first two years of program planning following enactment of the bill to establish staffing priorities, contracting plans, budgets, performance management indicators, and calendars to deliver on the goals and objectives of the bill.

The national revegetation strategy, will include the creation of an assessment tool to determine which federal forests are most in need of revegetation efforts. This report details plans for the establishment of an interagency task force between federal and non-federal entities that will develop revegetation plans to be applied in the six western regions of the U.S. National Forest System. For recovery after stand-replacing disturbances, this report outlines plans to establish an assessment framework to identify areas at high risk to such disturbances and the creation of planning teams for post-disturbance land management. The teams will develop model amendments to existing land and resource management plans to better plan for post-disturbance recovery activities.

Taken together, these programs are estimated to cost about \$39 million per year and require 36 new federal hires and 77 federal contractors to achieve the various program planning requirements within the first two years after enactment of the bill. While this report looks at the first year staffing, budget, and management requirements for Section 102 and Section 202 of the bill, these provisions make up less than 1% of the estimated \$6 billion annual budget for the ARCS Act. The majority of the remaining funds, staffing, and management requirements would support on-the-ground activities and operations to revegetate the western United States over the 10-year lifetime of the bill, as well as support all of the other programs of the sections of the ARCs Act not specified in this report.

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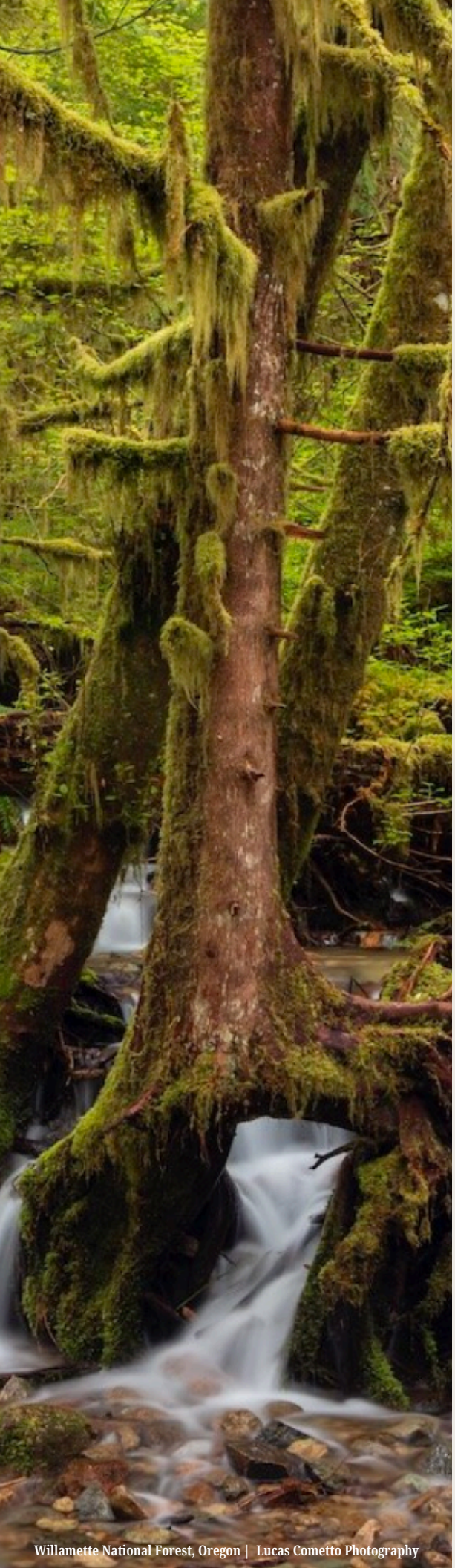


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2 | ARCS BACKGROUND

2.1 ENVIRONMENTAL PROBLEM AND SOLUTIONS

Environmental Problems: The United States boasts the fourth-largest national forest area in the world, comprising over 750 million acres of forests and wooded areas covering roughly 30% of the nation's total land mass (Tidwell, 2016). These forests play a significant role in mitigating climate change through carbon sequestration, where trees remove and store carbon from the atmosphere. In 2021, U.S. forests removed an estimated 0.8 gigatons (Gt) of carbon dioxide from the atmosphere (Hoover & Riddle, 2023), offsetting approximately 13% of U.S. gross carbon emissions in that year (EPA, 2024). Today, U.S. forests contain a total carbon storage stock of about 60 Gt in both living and dead biomass.

In recent decades, this massive carbon sink has come under threat from global climate change. Increasing human development and the associated climate impacts have generated new threats to these forest ecosystems. Climate change increases both the frequency and intensity of wildfires, storms, and droughts, predisposing forests to disproportionate impacts from invasive pests and pathogens and causing significant forest degradation. Forest degradation describes the loss of the forest's ability to provide essential ecosystem services to nature and people (Gichuki et al., 2019). Ecosystem services refers to "the direct and indirect benefits that ecosystems provide humans," like air filtration, stormwater management, habitat creation, and nutrient cycling (USDA-FS, 2022). This trend of forest degradation has resulted in forests' annual carbon sequestration rates declining by nearly 14% between 1990 and 2021 (Hoover & Smith, 2021). In other words, while U.S. forests have historically contributed to combating climate change, these lands

are sequestering significantly less carbon than they used to.

For western forests in the United States, wildfires represent the most significant driver of degradation. In the western United States, rising temperatures have extended annual fire seasons and expanded wildfire-prone areas by 10.4 million acres between 1984 and 2015 (Abatzoglou & Williams, 2016). Droughts pose a distinct but related driver of degradation that not only make forests more fire-prone but also stress trees, reducing their growth potential, carbon sequestration ability, and resilience to pests and pathogens (Sohn et al., 2016). Increasing extreme weather events such as hurricanes, other wind storms, heavy rainfall events, and ice storms also contribute to forest degradation through fragmentation of continuous forest, loss of trees, and increased soil erosion (Kogut, 2023).

Invasive species, particularly grasses, also threaten U.S. western forests. Populations of grasses such as cheatgrass, ventenata, and medusahead have expanded rapidly over the past century due to climate change and human development (Bansal et al., 2014). These species can tolerate arid conditions and subsist on the nutrients remaining after forest fires. They are also highly competitive, taking up soil resources and space from native species, thus reducing the abundance of native species (Bradley et al., 2018). The litter from dead invasive grasses also creates a highly flammable fuel source, increasing the risk of wildfires in invaded areas. Forest areas in the intermountain western United States with cheatgrass covering 15% or more of the landscape were twice as likely to burn multiple times compared

to those without the invasive grass (Bradley et al., 2018).

Climate change threatens forests, but forest degradation itself further exacerbates climate change, increasing forests' susceptibility to future degradation and natural disasters. These conditions create a positive feedback loop, as illustrated by Figure 1 (Busch, 2017). Rising

global temperatures lead to drier forests and milder winters with reduced snowpack, thereby increasing the susceptibility of vegetation to ignition and extending the length of fire seasons (Harris et al. 2020). As a result, wildfires both release carbon emissions directly and reduce the ability of forests to sequester additional carbon, increasing concentrations of greenhouse gasses in the atmosphere, further accelerating climate change (Figure 1).

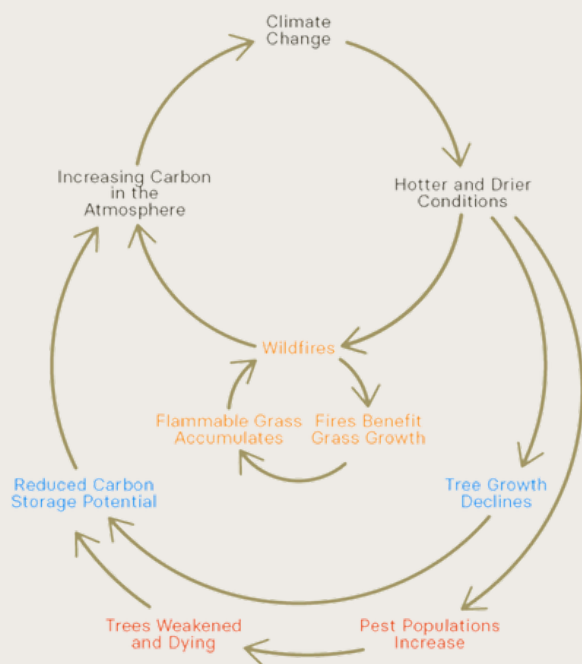


Figure 1. Positive Feedback Loop of Forest Degradation. This feedback loop is intensified by adjacent positive feedbacks: The burned area after wildfires benefits the spread of invasive grasses such as cheatgrass. These flammable grasses accumulate, dry out soils and easily catch fire, thus reinforcing the feedback loop. Hotter and drier conditions can furthermore lead to a decline in tree growth and increasing pest populations, which can both weaken and kill trees. Both increased fire from invasive grasses and declining tree growth ultimately lead to reduced carbon storage potential of forests, further increasing atmospheric carbon levels. Graphic by Kayla Diamond.

Deforestation and forest degradation can also have profound economic impacts. Apart from decreasing timber industry revenues, forest degradation also increases damage-repair costs following wildfire events. In California alone, increasing frequency and severity of wildfires have increased annual fire expenditures by nearly eight times from 25 million USD/year in the 1980s to around 400 million USD/year in the 2010s (Armstrong, 2020).

Forests provide cultural, spiritual, and recreational services as well. Across the globe, indigenous communities rely on forests for resources such as livelihood, food, and spiritual value (Molnar et al., 2004). When forests are degraded, the broader population also loses opportunities for recreation in those ecosystems. In 2023, the United States saw an estimated 60 million outdoor hiking participants who could be negatively impacted by forest decline (Statista Research Department, 2024). This reduced recreational use would negatively impact the \$560 billion outdoor recreation economy, which accounted for 2.2% of the U.S. gross domestic product (GDP) in 2022 (U.S. Bureau of Economic Analysis (BEA), 2023). This report builds on the previous report America's Revegetation and Carbon Sequestration Act of 2023: Workshop in Applied Systems Management released in Summer

2024 that further details the science behind forest degradation and the benefits of revegetation efforts in western U.S. forests.

Environmental Solutions: To counter this trend of increasing forest degradation, dedicated forest management efforts to increase carbon storage potential would help reduce the potential impacts of climate change in the coming decades. America's Revegetation and Carbon Sequestration Act of 2023 intends to increase revegetation and carbon sequestration efforts in the United States, targeting both federal and non-federal land west of the 100th meridian. This bill contains four titles: Revegetation and Reforestation (Title I), Carbon Sequestration through Forest Management and Innovation (Title II), Mass Timber (Title III), and Research (Title IV). This report focuses on provisions within the first two titles of the bill, specifically the National Revegetation Strategy (Section 102) and Recovery After Stand-Replacing Disturbances (Section 202). Outside of Section 102 and 202, the ARCS Act also contains provisions for a variety of programs to support more productive forests and improve carbon sequestration nationwide. These programs are explained in greater detail within the America's Revegetation and Carbon Sequestration Act of 2023: Workshop in Applied Systems Management released in Summer 2024, but are beyond the scope of this report's focus and program design.

The proposed national revegetation strategy in Section 102 directs the U.S. Department of Agriculture (USDA)—through the U.S.D.A. Forest Service (USDA-FS)—to identify western forests most in need of reforestation activities and revegetate at least 25% of those identified lands within 10 years of the bill's enactment. This strategy will establish vulnerability assessments, the identification of priority areas for revegetation, and

landscape-scale simulation modeling. Examples of prioritized areas include burned zones and regions with high carbon sequestration potential. This effort will also improve forest health and growth, soil health, landscape heterogeneity, and biodiversity through prescribed fires, thinning, and planting.

In order to enhance carbon sequestration of these western U.S. forests, Section 202 develops model amendments to existing USDA-FS land and resource management plans so that these plans better address recovery management following stand-replacing disturbances. Stand-replacing disturbances include wildland fires and droughts that kill all or most of the living overstory trees in a stand. In these cases, forest succession and regrowth may be limited for the affected forest unit without active management. Management approaches could include prescribed burns, forest thinning activities, and removal of invasive grasses to reduce wildfire potential.

2.2 ISSUE AND POLITICAL ANALYSIS

Sponsors and Committee: The ARCS Act of 2023 was introduced by Senators Joe Manchin (D-WV), John Barrasso (R-WY), Angus King (I-ME), and Roger Marshall (R-KS), representing a bipartisan effort to meet multiple climate and conservation goals. These sponsors are all members of the Senate Committee on Energy and Natural Resources.

Despite Senator Manchin and two of the bill's cosponsors representing states in the eastern half of the United States, the ARCS Act only concerns federal lands west of the 100th Meridian. The Senate Committee on Energy and Natural Resources has jurisdiction over federal land managed as part of the National Forest System, and these lands are

concentrated in the western United States. Senate committee norms dictate that a bill referred to the Committee on Energy and Natural Resources will be written to only cover lands west of the 100th Meridian, but if it is passed, this bill could set a precedent that could apply to federal forest lands across the country.

Current Status and Likelihood of Enactment:

Senator Joe Manchin introduced the bill on September 28, 2023 to the 118th session of Congress. Hearings were held on October 25, 2023. The ARCS Act of 2023 was returned to the Energy and Natural Resources Committee on September 26, 2024 for markup, along with approximately 70 other forestry bills. There was a committee vote on November 19, 2024, that sent a revised version of the bill to the full Senate for consideration and has a 20% likelihood of being enacted, according to GovTrack, an independent website that tracks Congressional actions and promotes government transparency. A factor contributing to this probability of enactment is that both the bill's sponsor, Senator Manchin, and cosponsors Senator John Barrasso and Senator Angus King serve on the Energy and Natural Resources Committee, and that Manchin is the Chair of that Committee (GovTrack, 2024).

One factor that may affect the ARCS Act from getting past debates on the Senate floor is the 2024 Supreme Court decision that overturned the Chevron Doctrine, a legal principle that required federal courts to defer to the discretion of federal agencies when interpreting legislation. The Chevron Doctrine allowed for more bipartisanship in drafting and proposing bills because members of Congress did not necessarily need to craft every detail of a bill to their political ideology. Now, bills must have clearer language when creating provisions or risk lengthy legal battles after enactment. This makes it more

challenging to pass legislation. The amended version of the ARCS Act that is reported out to the Senate floor may reflect this new challenge.

Related Legislation and Funding: The Promoting Effective Forest Management Act of 2023 (S.2867) was first introduced in the 117th Congress as the Promoting Effective Forest Management Act of 2022. Despite initially being proposed more than a year after the first iteration of the ARCS Act introduced in 2021, this bill is intended as a partner bill to the ARCS Act. The Promoting Effective Forest Management Act of 2023 is sponsored by Senator Barrasso and cosponsored by Senator Manchin. This bill is less comprehensive than the ARCS Act, but provides more specificity on forest thinning targets, the designation and management of old growth forests, and workforce development. It is designed to be enacted alongside the ARCS Act (S. Mullin, personal communication, September 17, 2024).

The Inflation Reduction Act (IRA) of 2022 appropriated significant funding to the Forest Service for wildfire management and forestry provisions. In the IRA, Division D, Title VIII allocates \$3.4 billion for wildfire management for the period of fiscal years 2022 through 2026. Title VIII also appropriates \$2.1 billion for ecosystem restoration, of which \$200 million is set aside to establish and implement a national revegetation effort on Federal and non-Federal land (H.R.5376). While the IRA would fund and support many of the same goals—specifically wildfire management and revegetation—as the ARCS Act, this legislation ensures that these efforts are carried out over the next decade to have long-lasting benefits for ecosystem restoration and carbon sequestration.

Support for the ARCS Act: Improved forest management and conservation is already a priority for the federal government. In a recent Executive Order, President Biden mandated that the Secretaries of the Department of the Interior and of the Department of Agriculture “institutionalize climate-smart management and conservation strategies that address threats to mature and old-growth forests on Federal lands” (Exec. Order No. 14072, 2022). Mature and old-growth forests provide many ecosystem services, including air purification, wildlife habitat, recreation, and cultural value. Crucially, they are living carbon stocks that mitigate climate change by sequestering carbon dioxide. The Biden Administration, in the Executive Order, reports that forests in the U.S. sequester more than ten percent of the greenhouse gas emissions generated by the U.S. economy each year (Exec. Order No. 14072, 2022).

Pew Research Center found that 88% of Republicans surveyed said that they supported the goal of planting one trillion trees, with the explicit aim to absorb carbon dioxide from the atmosphere (Tyson & Kennedy, 2020). Waldman (2020) claims that Republicans emphasized reforestation (which may also include afforestation, the planting of trees in places where they were not previously naturally growing) as a way to avoid discussing any reduction in use of fossil fuels and the emissions generated due to their combustion, which drive climate change. However, Republicans also generally support bills that promote timber harvesting (Heller, 2024).

Issues and Opposition: The mechanical thinning provisions in the ARCS partner Act (The Promoting Effective Forest Management Act of 2023) received opposition from environmental groups because thinning might cause soil erosion

and land degradation which would be counterproductive to the revegetation efforts (S. Mullin, personal communication, September 17, 2024). Similarly, the ARCS Act may also receive backlash for the inclusion of thinning efforts as a form of forest management.

At the same time, what appeals to the timber industry is opposed by many environmental groups. Existing legislation permits logging for wildfire mitigation strategies, which is often used as a rationale for harvesting timber beyond legal limits (Schueman, 2023). The Trump Administration's approach—which he is expected to return to as President in 2025—treated trees more as an economic resource. During his first term, the Trump Administration's policies often favored increased timber harvesting and viewed forests primarily through an economic lens (Teirstein & Bittle, 2023). This philosophical difference highlights a fundamental divide in how the two administrations view the role of forests in environmental policy and economic development.

Figure 2. Timber harvesting in Idaho | USDA Forest Service, Kyle Laven





3 | PROGRAM DESIGN AND OVERVIEW

GENERAL IMPLEMENTATION APPROACH: STAFFING, MASTER CALENDAR, BUDGET, PERFORMANCE

Staffing plan

The staffing plan focuses on completing tasks such as the development of revegetation assessment tools, the use of those tools to identify Federal land in need of revegetation, submitting a report to the U.S. Congress on the results of that assessment, and the establishment of interagency task forces to carry out revegetation efforts. The revegetation efforts themselves do not need to be completed within the first two years after enactment of the Act and so staffing plans for individual projects are beyond the scope of this report. To comply with the first and second year deadlines, most short-term tasks will be contracted. Longer term and recurring tasks will be completed by new hires within the Forest Service.

Master calendar

As the lead agency, the United States Department of Agriculture's Forest Service will coordinate the first and second year tasks. The Forest Service will assign specified tasks and roles to existing and new federal employees and hire contractors to complete the goals mandated for the first years of implementation. Each month's tasks are detailed for years 1 and 2. The last quarter preceding the first year of implementation is included in the calendar with a call for proposals beginning in mid-November of the year before the bill is enacted. Work will start on the date the bill is enacted, which for planning purposes will be assumed to be the beginning of January.

Budgeting

Given that the ARCS Act has several deadlines within the first two years after enactment, most short-term programs will be completed using Federal

contracts. Longer-term and recurring programs will be completed by new hires within the USDA Forest Service. However, these longer-term programs will extend throughout the ten-year period of the ARCS Act, and subsequent budgetary implications are beyond the scope of this first-year budget plan. Additionally, the budget focuses on the administrative and planning needs of Section 102 (National Revegetation Effort) and Section 202 (Recovery After Stand Replacing-Disturbances). This budgetary scope does not include the on-the-ground application of these portions of the bill but instead focuses on how the major planning programs in both sections will be staffed and funded within the first year following enactment.

The estimated cost for fringe benefits for these employees are based on the Congressional Budget Offices report comparing salaries and fringe benefits between federal and private-sector employees in 2022 (Congressional Budget Office, 2024). On average, employees received fringe benefits valued at 67% of their base salary. For the budget included here, this value is used for both new federal employees and contractors. For contracts, this assumes that the contracting company includes these expenses when calculating total costs of employees in the contract budget. Travel costs per diem of \$350/day are based on \$178 average per diem costs estimated by the Congressional Budget Office for lodging and meals, plus air and rail travel fares averaged over the duration of travel (Congressional Budget Office, 2024).

The salaries of the contracted positions were determined based on salary ranges posted on federal

job boards at the USDA for positions specifically related to contract specialists, supervisors (U.S. Department of Agriculture, 2024b), and management data analysts (U.S. Department of Agriculture, 2024a). The specific values represent the maximum value of the supervisory contract specialist position for the National Supervisor, the average value of the supervisory contract specialist for the Regional Coordinators, and the maximum of the data analyst position.

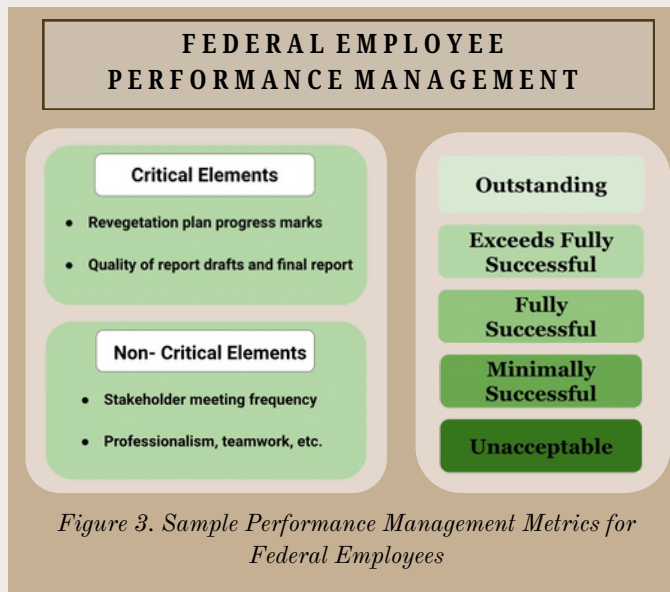
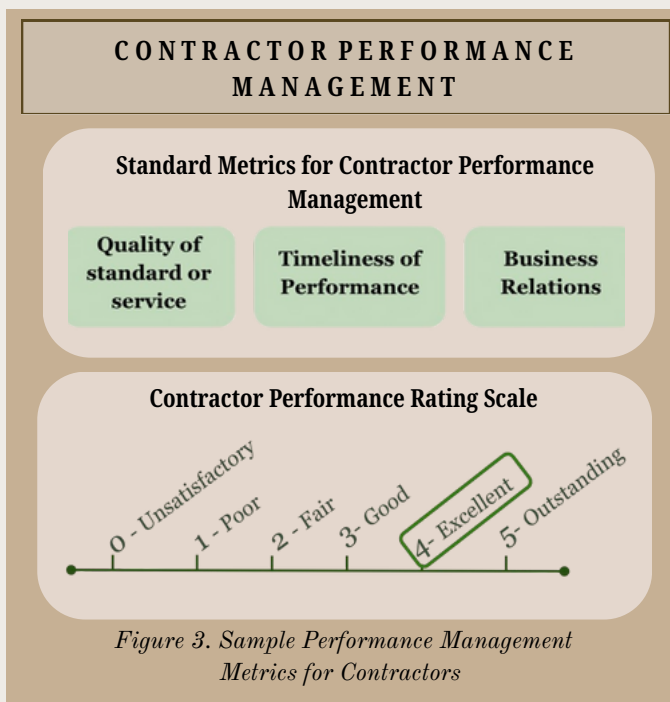
Performance management

The goals and underlying tasks of the bill are complex and interrelated, requiring collaboration among government and non-government entities. Using Key Performance Indicators (KPIs) for each objective will help this effort to progress. This memo outlines the performance management plans for the first year, with KPIs set at the one-year mark after enactment of the bill.

In terms of contractor performance management, the U.S.D.A. Forest Service utilizes a system focused on three key metrics: Quality of standard, Timeliness of Performance, and Business relations. Contractors are evaluated on a scale from 0 to 5, with zero indicating unsatisfactory performance and five representing outstanding performance. Adapting this system into the performance management framework, aspires for excellence while also maintaining a realistic perspective on our goals. As a result, we established a threshold for acceptable performance at a score of 3, which is categorized as "good" (U.S. Forest Service, 2023).

Another integral element of the Reporting & Feedback structure is individual performance evaluation and management. Within US Federal Agencies, two important considerations are

performance elements, which outline what employees have to do, and standards, which specify how well they must complete the tasks (Office of Personnel Management, 2017). During performance evaluation, each element is assigned a rating on a Performance Rating Scale which includes, for worst to best, Unacceptable, Minimally Successful, Fully Successful, Exceeds Fully Successful, and Outstanding as illustrated in Figure 3 below (Office of Personnel Management, 2017).





4 | PROGRAM PLANNING: SECTION 102

NATIONAL REVEGETATION STRATEGY

The national revegetation effort requires the development and use of revegetation assessment tools to identify federal land in need of such efforts, the establishment of interagency task forces to carry out revegetation efforts, and the development of revegetation plans. The program design presented here also includes the introduction of pilot revegetation projects in each of the six western Forest Service regions.

One year after enactment of the bill, general progress of implementing section 102 will be measured via assessing the percent of budget used during year one. More specific Key Performance Indicators (KPIs) are displayed in each of the following program planning sections.

4.1 ASSESSMENT TOOL

Section 102(b) requires the Secretaries of Agriculture and Interior to develop and apply a National Revegetation Assessment Tool for each of the six western regions of the National Forest System.

4.1.1. Staffing Plan

An Assessment Tool will be developed individually for each western Forest System region, despite its singular name. The tools must be developed within 180 days after enactment of the ARCS Act. Within one year of enactment, the tools must identify the number of acres of Federal land in need of revegetation.

To meet the required deadline, the Forest Service will contract out the development and application of the revegetation assessment tools, using one national contract that covers all six western Forest System regions. Contract staff will be assigned to each region and will report to six regional coordinators who then report to a national supervisor. This supervisor will coordinate with the Deputy Chief of the National Forest System, whose office will supervise the contract. Development and application of the assessment tools is expected to require 30 data

analysts. Together with the six regional coordinators and the national supervisor, 37 total contract staff are expected. The company selected for the contract should have expertise in forest science and management, with a particular emphasis on spatial analysis.

In addition to developing and applying the tools, the contractors will report on the number of acres of Federal land in need of revegetation and non-Federal land whose owners would like to be involved in revegetation, and the locations of both those Federal and non-Federal parcels of land. These reports will be collated by the contracted company and reviewed by the Deputy Chief of the National Forest System and the Chief of the Forest Service for the Secretaries of Agriculture and Interior to publish. Publication of that report is due 18 months after the bill is enacted.

While Section 102 requires task forces to develop ten-year strategies to revegetate 25% of priority lands within two years of enactment, this implementation phase lies outside the current staffing plan and will depend on regional needs identified through the Section 102(b) assessment.

4.1.2. Budget Plan

The development of the assessment tools will come with total costs of approximately \$16.1 million (Table 1). The National Supervisor position will be paid a salary of \$158,860/year, and the six regional coordinators and 30 data analysts will receive an

annual salary of \$140,529/year and \$127,707/year, respectively. Fringe benefits of 67% of the contractors' base salary will be applied. Additionally, the total cost of the salary and fringe benefits for each employee is added to the contract cost to determine the overall contract overhead.

Table 1: Budget for the Assessment Tool (Section 102b). Numbers are rounded to the nearest \$1,000

Position	Staffing	Salary/ Contractor	Fringe Benefits/ Contractor	Contract Overhead	Total
National Supervisor	1	\$159,000	\$106,000	\$265,000	\$531,000
Regional Coordinator	6	\$141,000	\$94,000	\$1,408,000	\$2,816,000
Data Analyst	30 (5 in each of 6 regions)	\$128,000	\$86,000	\$6,398,000	\$12,796,000
Total	37	\$4,833,000	\$3,166,000	\$8,072,000	\$16,143,000

4.1.3. Performance Management Plan

The assessment tools must be fully developed six months after the bill has been passed. This means that after one year, the assessment tool should have already been under full operation for at least six months. The KPIs to measure whether the tool has been established appropriately as envisioned by the bill are: (1) Assessment tool developed, (2) methodology reviewed by subject matter experts, (3) all relevant data sources included, and (4) adequate user interface developed. Some of these KPIs require surveys with experts (methodology assessment) or active users (user interface) to measure success. Finally, it will also be measured whether the actual assessment based on the tool is making progress, based on the percentage of forest regions with assessment results by the one year deadline.

4.1.4. Master Calendar

Year one implementation of Section 102 begins with a comprehensive staffing initiative during the pre-quarter and first month (Table 2).

Recruitment will begin in November, prior to the enactment of the Act, targeting senior positions such as the national supervisor, which are expected to be filled within the first two months. The hiring of junior staff, including critical positions such as data analysts for the task forces, will be completed within the first month.

During the first year, significant efforts will be targeted on developing the National Revegetation Assessment Tool. This tool will be created through extensive collaboration between contracted specialists with expertise in forest science and management. From January through June, teams establish methodology and conduct

spatial analysis of federal lands using geographic information systems and remote sensing data. Quarterly coordination meetings will improve consistency across regions. The final testing and

validation phase of the tool concludes by September, to determine which areas of the National Forest System are in greatest need of revegetation.

Section 102 Year 1 & 2: Create Assessment Tool to Establish Priority Area																									
Task #	Task	Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
		J	F	M	A	M	J	Ju	A	S	O	N	D	J	F	M	A	M	J	Ju	A	S	O	N	D
1	Hire Contractor																								
2	Develop Assessment Tool																								
3	Development Process Meetings																								
4	Final Testing of the Tool																								
5	Use Assesment Tool to Identify Priority Sites																								

Table 2: Master Calendar for the Assessment Tool (Section 102)

4.2. INTERAGENCY TASK FORCE

The interagency task forces will develop and implement plans to revegetate the priority lands identified in the assessment of revegetation needs. The revegetation plans must be developed within two years of enactment of the ARCS Act. Each task force will focus on one of the western regions of the National Forest System. As such, there will be six total task forces, each overseen by the existing USDA-FS Regional Forester from each region. The Deputy Chief of the National Forest System, through new regional hires, will work with the heads of federal natural resource agencies to create and support the task forces.

Natural resources agencies represented on the task forces will include the USDA Forest Service,

as well as the United States Fish and Wildlife Services, the Bureau of Land Management, and the United States Department of Agriculture (USDA) Climate Hubs. The USDA Climate Hubs are led by the Forest Service and the Agricultural Research Service, and involve three agencies managed by the Under Secretary for Farm Production and Conservation: the Risk Management Agency, the Farm Service Agency, and the Natural Resources Conservation Service. The task forces must also consist of non-Federal entities, including Indian Tribes, and should include partnerships with individual States.

4.2.1. Staffing Plan

The Forest Service is set to establish six regional interagency task forces to develop these revegetation efforts, each focused on a specific western region of the National Forest System. These task forces will create plans to revegetate at least one quarter of the priority lands identified in earlier assessments, with plans due within two years of the passage of the ARCS Act. The existing Regional Foresters will oversee the task forces, which will bring together representatives from various agencies.

Each region will add six new positions, totaling 36 hires across all regions. The key roles include a GS-9 Task Force Coordinator to manage inter-agency cooperation and lead plan development, a GS-9 Relations Specialist to handle tribal and non-federal partnerships, and four GS-12 Data Analysts specializing in GIS. The Task Force Coordinator and Relations Specialist positions require either two years of relevant experience or a master's degree, with a preference for candidates familiar with federal-tribal relations and inter-agency collaboration. Data Analysts need at least five years of environmental data

experience, ideally in restoration or conservation work. The Forest Service has 18 months from the Act's enactment to establish these task forces and complete the hiring process.

4.2.2. Budget Plan

The overall budget for the interagency task forces is \$5.35 million, which is used for hiring the required employees. A GS-9 level employee has a master's degree and would get a salary of \$97,000. Employees at this level will serve as the Task Force Coordinator and Relations Specialist positions. Annual travel costs were calculated at \$10,500 per employee, for 30 travel days including a \$178 per diem (\$110 lodging, \$68 meals and incidental experiences) and \$5,160 overall annual travel costs (8 trips for \$645 on average). Along with the assumption that fringe benefits for federal employees is 67%, the totals were calculated as shown in Table 3 below. The Data Analyst positions would be filled by GS-12 level employees with a salary of \$97,000. The 67% of fringe benefits would be applied, but these employees would not require travel. Accounting for these factors, the interagency task forces will cost approximately \$5.4 million per year in total.

Table 3: Budget for Interagency Task Forces and Revegetation Plans. Numbers are rounded to the nearest \$1,000.

Position	Staffing	GS Level	Fringe Benefits	Travel Costs	Total
Task Force Coordinator	6 (1 per region)	GS-9\$67,000	\$45,000	\$11,000	\$734,000
Relations Specialist	6 (1 per region)	GS-9\$67,000	\$45,000	\$11,000	\$734,000
Data Analyst	24 (4 per region)	GS-12\$97,000	\$66,000	-	\$3,888,000
Total	36	\$3,140,000	\$2,100,000	\$126,000	\$5,360,000

The KPIs that help to track progress are: (1) All open positions published, (2) 100% of senior staff hired, and 50% of junior staff hired, and (3) regular meetings convened with all relevant agencies. As the task force has to be established and start working 1.5 years after enactment at the latest, it is important that most members are

already hired, with remaining positions published at the one year mark, and the team has started to collaborate with all relevant agencies. This gives the members time to organize collaboration and, specifically senior staff, the possibility to plan ahead on how they want to lead their collaboration.

Case Study: Uncompahgre Plateau Collaborative Restoration Project



Uncompahgre Plateau, Colorado | Kent Williamson



Uncompahgre Plateau Project Area

The Uncompahgre Plateau encompasses three National Forests in southwestern Colorado: the Grand Mesa, Uncompahgre, and Gunnison National Forests. The Forest Service considers the plateau a priority landscape and leads an ongoing collaborative effort to restore its forests (Gardiner et al 2024). Members of the collaborative included the Forest Service, the Colorado Forest Restoration Institute at Colorado State University, the Uncompahgre Partnership (a local nongovernmental organization), local and county governments, the Bureau of Land Management, and advocacy groups representing recreation, conservation, timber, and hunting interests. The plateau's restoration began in 2010 (Uncompahgre Partnership 2016).

This project was an example of restoration success through collaboration across organizations, similar to the model of the Interagency Task Forces of the ARCS Act. Members of the Uncompahgre collaborative jointly developed goals and performance indicators for each major restoration project on the plateau. They also collaboratively designed and carried out monitoring of restoration, with scientific experts leading the process. Field measurements were performed by Forest Service personnel, outside experts, and volunteers from various stakeholder groups. Monitoring data were curated and analyzed by the Colorado Forest Restoration Institute, which informed all collaborators of its findings. Those findings informed discussions of how to improve restoration projects (Gardiner et al 2024). The collaborative nature of these projects can be replicated at scale with multiple federal agencies for planning and managing revegetation across units of the National Forest System.

Key objectives of the restoration efforts included reestablishment of native grasses and forbs in diverse understories, maintaining timber production and creating new markets for forest products, reducing long-term costs of fighting wildfires, decreasing the chance for catastrophic fires, enhancing habitat, including protecting old growth and large trees, and employing adaptive management in the face of climate change. Restoration projects on the plateau were conducted from 2010 to 2020 and their progress was monitored by multiple parties within the collaborative. Restoration monitoring is scheduled to continue through 2035. These projects covered 160,000 acres, which is about 5.2% of the 3.1 million acres of Forest Service lands on the plateau (National Forest Foundation, n.d.). Types of restoration projects included prescribed burns, tree trimming, tree removal, timber harvests, invasive species removal, and native plant establishment (Gardiner et al 2024). As a result of the restoration projects, native species populations have been maintained, tree crown fire potential has been reduced, the spatial heterogeneity of treatment areas has increased, and 7,000 acres of habitat have been restored. However, woody surface fuels from young trees and shrubs doubled, a remaining challenge for wildfire management (Colorado Forest Restoration Institute, n.d.). These results demonstrate the potential for interagency cooperation to restore degraded National Forests, while recognizing that any revegetation effort will face difficulties.



Figure 4: Images depicting one of the project’s management areas before and just over a year after a prescribed burn treatment

Images courtesy of the Colorado Forest Restoration Institute and USDA-FS

4.2.3. Master Calendar

Year one implementation of the Interagency Task Force begins with a recruitment process during the pre-passage quarter and first quarter after passage (Table 4). Recruitment will begin in November, prior to the enactment of the Act, targeting senior positions such as the national supervisor, which are expected to be filled within the first two months after enactment. The hiring of junior staff, including critical positions such as data analysts for the task forces, will be completed within the first three months. This will be followed by the development of Revegetation Plans which the Interagency Task Force will carry out. Developing revegetation plans to revegetate at least 25% of identified areas in the US Forest System is at the core of the ARCS Act. The USDA-FS will develop a ten-year revegetation strategy and implementation plan. This strategy should prioritize Federal lands such as burned areas that pose a risk to residential and public infrastructure, areas prone to invasive species, mined land, floodplains, and locations with significant carbon sequestration potential. On non-Federal land, USFS should work with states, tribes, and private landowners to ensure efforts do not adversely impact timber or forest material markets from private working forests.

Table 4: Master Calendar for the Interagency Task Forces in Section 102.

Section 102 Year 1: Task Force Recruitment															
Task #	Task	Pre-Q1		Q1			Q2			Q3			Q4		
		N	D	J	F	M	A	M	J	Ju	A	S	O	N	D
1	Publish all Open Positions														
2	Hire Senior Staff														
3	Hire Junior Staff														

4.3. REVEGETATION PLANS

4.3.1. Staffing Plan

This section mandates the interagency task forces to implement plans to revegetate at least 25% of the priority lands identified in the assessment of revegetation needs produced following Section 102(b). The implementation is to be done within ten years of plan creation; that means the plans must be implemented by twelve years after the bill is enacted. Forest Supervisors, in collaboration with the interagency task forces, will create hiring plans for new positions to do on-the-ground revegetation work.

4.3.2. Budget Plan

The budget for revegetation plans is included in hiring for the interagency task forces that will develop these plans. This way, the overall budget covers the regional-scale planning effort. The specific revegetation plans for particular forest will be more detailed and formed later. They are beyond the scope of this program design. The budget for this section is therefore already included in Table 3 in section 4.2.2 Interagency Task Forces.

As the revegetation plans are supposed to be finished within two years after enactment of the bill, the effort should be underway within the first

year. The development of such plans most likely will require several rounds of review with different experts within the US Forest Service, such as the regional forest supervisors for individual national forests but also centralized teams, such as the Climate Hubs. Therefore the KPIs for measurements of success after year one will be: (1) Initial draft plan developed, and (2) comments on initial draft received from the six regions.

4.3.3. Master Calendar

With the assessment tool being fully developed and the Task Force members hired entering year two, the interagency task forces can now begin implementing their revegetation plans using the results of the assessment tool, which will identify which forests are in need of revegetation. There will be regular assessment and adjustment of strategies based on initial results, with data collection and analysis becoming more sophisticated based on initial experiences. The team is expected to have quarterly meetings starting in July with relevant stakeholders including the Forest Service and representatives from the United States Fish and Wildlife Service, the Bureau of Land Management, and the USDA Climate Hubs (Table 5).

Table 5: Master Calendar for Revegetation Plans in Section 102.

Section 102 Year 2: Develop Revegetation Plans													
Task #	Task	Q1			Q2			Q3			Q4		
		J	F	M	A	M	J	Ju	A	S	O	N	D
1	Develop Revegetation Plans												
2	Climate Hubs and Regional Planning Center Meetings												
3	Revegetation Plan Implementation												

4.4. REPORT TO CONGRESS

The initial annual report to Congress, mandated by section 102(h), will be contracted to the same company developing the revegetation assessment tools. Under supervision from the Deputy Chief of the National Forest System, this report will detail the acreage requiring revegetation, completed revegetation work, carbon sequestration improvements, and implementation challenges. This first report must be submitted one year after enactment.

For subsequent annual reports, two GS-9 Staff Writer positions will be established. These writers will be responsible for compiling information from interagency task forces, Forest System units, and contractors into comprehensive national reports. The positions require candidates with master's degrees in public policy, data analysis, communications, or related fields, along with two years of experience working with the Legislative Branch or Federal agencies. The delayed hiring timeline will allow adequate time for candidate evaluation and selection.

4.4.1. Budget Plan

The Report to Congress comes with a total annual cost of \$853,000. The two staff writers, given their similar level of expertise to the contracted data analysts, will receive an annual salary of \$127,707, which is subject to fringe benefits and contract overhead costs.

4.4.2. Performance Management Plan

One year after enactment the first report to Congress must be completed. The report will include all the KPIs mentioned above, including a

brief explanatory statement on current status for each. In case any of the KPIs have not been successfully achieved, there should be a statement on respective implementation barriers and what can be done to address them.

4.4.3. Master Calendar

The second year culminates in comprehensive progress evaluation and preparation of the second annual congressional report. The timing of tasks for this report are outlined in Table 6 below.

Table 6: Master Calendar for the Report to Congress in Section 102.

Section 102 Year 1 and 2: Annual Report to Congress																									
Task #	Task	Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
		J	F	M	A	M	J	Ju	A	S	O	N	D	J	F	M	A	M	J	Ju	A	S	O	N	D
1	Coordinate Contractor for																								
2	Hire Two New Writers to Write																								
3	Prepare Annual Report																								



5 | PROGRAM PLANNING: SECTION 202

*RECOVERY AFTER STAND
REPLACING DISTURBANCES*

Section 202 identifies units of the National Forest System that are deemed to be at “high or very high risk” of experiencing a stand-replacing disturbance within ten years of the enactment of the ARCS Act. The identification of at-risk forests must be completed within one year of enactment. There will be one contract for the entire country, overseen by the Deputy Chief of the National Forest System. Contract solicitation will begin approximately one month before enactment. The contractor selection process will continue through the first month and the contract will begin in the second month of Quarter 1.

One year after enactment, general progress of implementing section 202 will be measured via assessing the percent of budget used for year one. More specific KPIs are displayed in each of the following sections.

5.1. IDENTIFICATION OF HIGH AND VERY HIGH RISK AREAS

5.1.1. Staffing Plan

While there are data available on current forest conditions and the history of stand-replacing disturbances, Forest Supervisors and their individual units will not be expected to take on the additional responsibilities of collecting, organizing, and analyzing the information for their region. Thus, an increased workforce is necessary to complete this task. The identification of at-risk forests must be completed within one year of bill enactment, so contractors will be hired to meet that deadline. The contractors will have experience in GIS, data analytics, and data interpretation, all of which are necessary for identifying risk by geography. There will be one contract for the entire country, overseen by the Deputy Chief of the National Forest System. There will be ten contracted staff including the supervisor. Those staff will collect, organize, and analyze data on the risk of stand replacing disturbances of Forest System units. Contractors will report their results to the Deputy Chief of the National Forest System.

5.1.2. Budget Plan

The contract will follow a similar structure to that of the revegetation assessment tools outlined in section 5.1 of this report. The National Supervisor, six Regional Coordinators, and 24 Data Analysts will receive \$158,860/year, \$140,529/year, and \$127,707/year, respectively. These contractors will receive fringe benefits budgeted at 67% of their base salary. Additionally, the overhead cost of the contractors will add the total of the salaries and fringe benefits to the contract price. This contract will cost approximately \$13.6 million/year (Table 7).

5.1.3. Performance Management Plan

The identification efforts must be performed by one year after enactment, and the identification effort's progress will be measured using the following KPIs: (1) Assessment methodology created and aligned with experts, (2) High and very high risk areas identified, and (3) Results and next steps communicated to all six regions.

Table 7: Budget for Identification of High Risk Areas in Section 202. Numbers are rounded to the nearest \$1,000.

Positions	Staffing	Annual Salary	Fringe Benefits	Contract Overhead	Total
National Supervisor	1	\$150,000	\$107,000	\$265,000	\$531,000
Regional Coordinator	6	\$141,000	\$94,000	\$1,408,000	\$2,816,000
Data Analyst	24	\$128,000	\$86,000	\$5,118,000	\$10,237,000
Total	31	\$4,067,000	\$2,652,000	\$6,792,000	\$13,584,000

5.1.4. Master Calendar

The Identification of High Risk Areas team employs sophisticated risk assessment methodologies and coordinates closely with regional Forest Service offices to identify and

categorize at-risk areas. In between identifying high risk areas, data analysts and regional foresters will meet every other month to coordinate and discuss target areas in need of recovery (Table 8).

Table 8: Master Calendar for the Identification of High Risk Areas in Section 202.

Section 202 Year 1: Identify and Categorize Target Areas															
Task #	Task	Pre-Q1		Q1			Q2			Q3			Q4		
		N	D	J	F	M	A	M	J	Ju	A	S	O	N	D
1	Identification of High Risk Areas														
2	Meeting with Data Analysts and Regional Foresters														

5.2. POST-DISTURBANCE PLANNING TEAMS

Section 202(c) requires that an interdisciplinary post-disturbance planning team must be created to plan revegetation efforts within two years of enactment. Specifically, this team will create a model land and resource management plan. Due to the short timeline, the Deputy Chief of the National Forest System will employ contractors to form the planning team within the first year of operation. This contract will employ one lead coordinator and six planning team consultants.

5.2.1. Staffing Plan

This model plan will serve as a template for making site-specific revegetation decisions following stand-replacing disturbances in individual National Forest System units. The plan may be structured as an adaptable decision matrix and will function as an amendment to existing management plans when implemented at specific Forest System units.

Given the two-year deadline for plan completion, the planning team must be established no later than eighteen months after enactment. The Deputy Chief of the National Forest System will engage contractors with expertise in spatial data science and large-scale revegetation experience to form this team. Seven contracted staff will be required: six regional representatives and one lead planner for coordination. While the initial contract will span two years, future contract extensions or further contracts may be necessary to fulfill the requirement in Section 202(e) to update individual Forest System unit management plans within ten years of enactment.

To satisfy the interdisciplinary requirement specified in Section 202(c), contractors will hold monthly conferences with the Deputy Chief of the National Forest System and Regional Foresters, facilitating collaboration between contract staff and existing Forest Service employees. The Deputy Chief will maintain supervisory authority over the contract.

5.2.2. Budget Plan

The model amendment plan program will cost approximately \$3 million/year (Table 9). The lead coordinator will have a salary of \$140,529/year. The consultants will receive a salary of \$127,707/year. Applying the contractor fringe benefits at 67% of the base salary and overhead costs will add the total of the salaries and fringe benefits to the total contract cost. As the contractor that represents the post-disturbance planning team will also create the amendment models for land and resource management plans, Table 9 includes the budget for both items.

Table 9: Budget for Post-disturbance Planning Teams and Amendment models in Section 202. Numbers are rounded to the nearest \$1,000.

Positions	Staffing	Annual Salary	Fringe Benefits	Contract Overhead	Total
Lead Coordinator	1	\$141,000	\$94,000	\$235,000	\$469,000
Planning Team Consultants	6	\$128,000	\$86,000	\$1,280,000	\$2,559,000
Total	7	\$907,000	\$599,000	\$1,514,000	\$3,029,000

5.2.3. Performance Management Plan

To evaluate whether adequate progress has been made on the post-disturbance planning team, the following KPIs will be assessed one year after enactment : (1) Contractors hired, (2) contractors score a minimum of. 4 (“excellent”) in USDA Forest Service Contractor Performance Review, (3) contractors provide appropriate interdisciplinary expertise, and (4) contractors and federal teams interact on a regular schedule. It is essential that these measures and teams are implemented effectively to improve forest management and successful recovery of areas affected by significant disturbance.

5.2.4. Master Calendar

Year One focuses on establishing coordination between the contractor and internal federal teams which is followed by a special task force being created for the post disturbance management. During Year Two, the focus shifts to the creation of interdisciplinary post-disturbance plans. These teams will be responsible for developing model amendments for land and resource management plans, providing a framework for site-specific revegetation efforts following stand-replacing disturbances. Their coordination timeline is outlined in Table 10 below.

Table 10: Master Calendar for Post-disturbance Planning Teams in Section 202.

Section 202 Year 1 and 2: Post-Disturbance Management Team																											
Task #	Task	Pre-Q1		Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
		N	D	J	F	M	A	M	J	Ju	A	S	O	N	D	J	F	M	A	M	J	Ju	A	S	O	N	D
1	Establish Interaction w/ Contractor + Internal																										
2	Post-Disturbance Management Team Created																										
3	Post-Disturbance Management Team Meeting																										

5.3. AMENDMENT MODELS FOR LAND AND RESOURCE MANAGEMENT PLANS

Section 202(d) specifies that the post-disturbance management team must create a model land and resource management plan detailing how to make site-specific revegetation decisions when stand-replacing disturbances occur on units of the National Forest System. This model plan will serve as a general template to later be adapted to individual Forest System units, amending their existing land and resource management plans. The model plan must be completed within two years of enactment. This two-year deadline does not apply to amending the existing plans, it only applies to the creation of the model plan.

5.3.1. Staffing Plan

The model land and resource management plan will be developed by the post-disturbance planning team (as outlined in Section 6.2) and will require no additional hires.

5.3.2. Budget Plan

As the amendment models will be developed by the contractor hired to constitute the post-disturbance planning team, the budget for creation of amendment models is included in section 6.2.2 Budget Plan for Amendment Models.

5.3.3. Performance Management Plan

The model plan must be completed within two years of enactment. The amendment model plan will be evaluated using the following KPIs: (1) Draft amendment model created, (2) initial review

session on scientific approach convened, (3) initial review session on applicability and future roll-out convened. Successfully completing the model plan and meeting the specified KPIs will prepare the National Forest System for effective revegetation and recovery following stand-replacing disturbances.

5.3.4. Master Calendar

Beginning in January of Year One, teams will work on drafting models through June, dedicating this six-month period to developing comprehensive frameworks based on the identification and categorization efforts (Table 11). From July through December, review sessions will be held to evaluate both the scientific rigor and practical applicability of these models.

Table 11: Section 202, Master Calendar, Amendment models

Section 202 Year 1: Model Amendment															
Task #	Task	Pre-Q1		Q1			Q2			Q3			Q4		
		N	D	J	F	M	A	M	J	Ju	A	S	O	N	D
1	Creation of Model Amendment														
2	Review Sessions on Scientific Approach														

5.4. REPORT TO CONGRESS

The Report to Congress will follow the same implementation approach as in Section 102, including the same KPIs and calendar. The staffing and budget consists of the same two staff writers explained in section 102, Report to Congress. The same two hires will be responsible for reports on both sections.

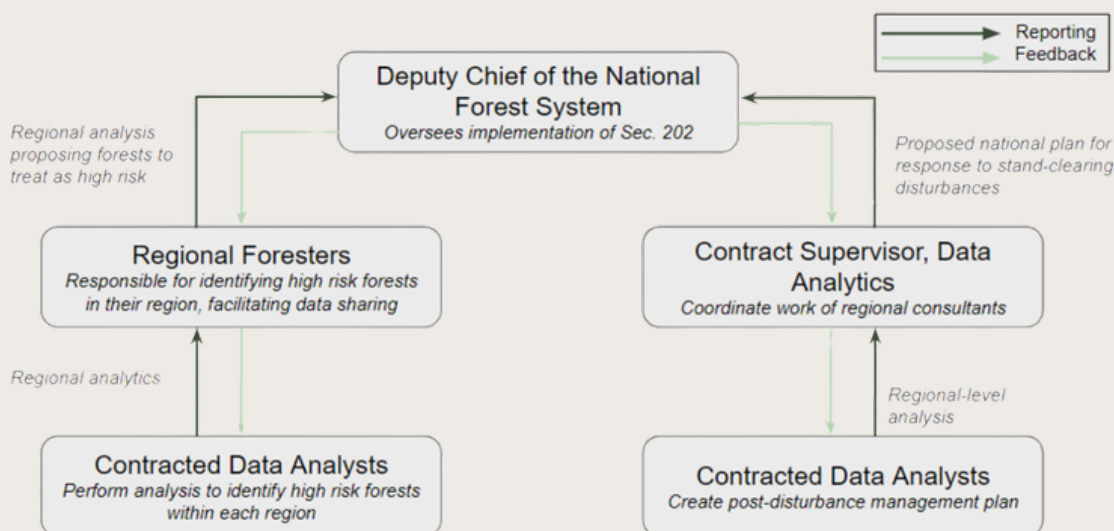
5.5. FEEDBACK AND REPORTING

The Deputy Chief of the National Forest System will oversee the activities undertaken through Section 202. There are two main lines of reporting that they will oversee. The first is with the contractor selected to produce a national plan for responding to stand-clearing disturbances. The contractor will have a team of data analysts that they manage in order to produce the plan. The second reporting line falls under the Regional Foresters. Each Regional Forester is responsible for managing a team of Contracted Data Analysts to produce an analysis of which forest stands in their region should be treated as high or very high risk of a stand-clearing disturbance.

As in Section 102, feedback will primarily flow from the Deputy Chief, down the reporting chain

(Figure 6). The Regional Foresters will communicate that feedback to the set of Contracted Data Analysts they oversee so that the final analysis includes the requisite information, metrics, and granularity as specified by the Deputy Chief. The Contract Supervisor will likewise provide top-down feedback to their team of Contracted Data Analysts, ensuring that the proposed national plan is realistic, actionable, and accomplishes important goals as established by the Deputy Chief. In both cases, junior employees and contracted analysts are also responsible for reporting up the chain when there are data limitations or challenges with implementing the system as envisioned by senior leadership.

Figure 6: Feedback and Reporting System in Section 202





6 | PROGRAM PLANNING SUMMARY

6.1. STAFFING PLAN

For expediency, short term tasks between six months and two years within Section 102 of the ARCS Act will be contracted. The entirety of Section 202 will be contracted, due to its rapid timeline. Tasks in Section 102 with a timeline of greater than two years will be completed by new employees hired under existing central and regional Forest Service administrators. There will be 38 new hires in total during the first two years

(Table 12). The key central administrators are the Chief of the Forest Service and the Deputy Chief of the National Forest System. The key regional administrators are the Regional Foresters. Collaboration with Federal and non-Federal agencies outside of the Forest Service is required to accomplish the mandates of Section 102's staffing plan.

Table 12: Staffing Plan for Section 102 and 202

Subsection	Task	Supervisor(s)	New Hires or Contractors
102(b)	Develop and apply National Revegetation Assessment Tool	Deputy Chief of the National Forest System	37 contract staff under an 18 month contract, led by National Supervisor
102(d)	Create interagency task forces (one per region) to develop revegetation plans	Deputy Chief of National Forest System, Regional Foresters	36 new hires: 6 Task Force Coordinators 6 Relations Specialists 24 Data Analysts
102(f)	Implement revegetation plans	Forest Supervisors, interagency task forces	None (the Forest Supervisors will create staffing plans later)
102(h)	Annual Report to Congress on success of revegetation	Deputy Chief of the National Forest System	First year: staff from the same contractor that develops the Revegetation Assessment Tools Subsequent years: 2 new hires under Deputy Chief: Annual Report Writers
202(b)	Identify forests at high or very high risk	Deputy Chief of the National Forest System	Approximately 10 contract staff, including 1 supervisor, under a 1 year contract
202(c)	Create post-disturbance planning team	Deputy Chief of the National Forest System	7 contract staff: 1 lead coordinator 6 regional staff
202(d)	Develop model land and resource management plan	Deputy Chief of the National Forest System	None (the post-disturbance planning team will do this work)
Total			38 new hires 4 contracts

6.2. BUDGET PLAN

Table 13: Overall Budget for Sections 102 and 202. Numbers are rounded to the nearest \$1,000.

Task	Cost
Section 102 - Assessment of Revegetation Needs	\$16,143,000
Section 102 - Interagency Task Force	\$5,360,000
Section 202 - Assessment of Risk to Stand-Replacing Disturbances	\$13,584,000
Section 202 - Interdisciplinary Teams and Model Land and Resource Management Plan Amendment	\$3,029,000
Report to Congress	\$853,000
Total Cost	\$38,968,000

6.3. PERFORMANCE MANAGEMENT PLAN

The Performance Management Plan for the first year of America's Revegetation and Carbon Sequestration Act of 2023 outlines critical steps to establish a national revegetation effort and prepare for recovery from stand-replacing disturbances, among other objectives (Table 14). The plan includes implementing yearly evaluations to measure progress and integrate feedback, as well as establishing adaptable KPIs that will evolve over the ten-year period of the bill. Additionally, it develops a reporting structure

that is region-specific yet consistently aligned with overall goals. By fostering collaboration among various agencies and experts, the plan will foster timely implementation and effective monitoring of progress. This structured approach not only supports the immediate objectives of the ARCS Act but also lays the groundwork for sustainable forest management and enhanced carbon sequestration in the long term. Continuous feedback and reporting mechanisms will be vital to address challenges and optimize strategies as the initiative unfolds.

Table 14: Performance Management Overview for Section 102 (Time period: First year).

Objective	Year 1 KPIs	Measurement
Section 102		
Task force	All open positions published	# of openings on website
	100% off senior staff hired	# of hires
	50% of junior staff hired	# of hires
	Regular meetings with all relevant agencies	Calendar with all relevant meetings established and in use
Assessment tool	Assessment tool developed	yes/no
	Calculation methodology reviewed by subject matter experts and deemed at least 3 ("good")	Expert survey results (0-5)
	All relevant data sources included	% of given data sources included
	Adequate user-interface developed	Usability survey in all regions
	Assessment of revegetation needs on sufficient progress	% of forest regions with first assessment results
Revegetation plans	Draft plan developed	yes/no
	Feedback on draft implemented (conduct improvement workshop with regional centers if feedback is less than 3 ("good"))	Feedback surveys with all 6 regions
Pilot projects	One pilot started in each region	# of regions that started a pilot
	Initial feedback provided for revegetation plans	Feedback survey with all 6 participating units
	Best-practice sharing started	Accessible list of learnings; Minutes from joint learning sessions with all units
Budget	Year 1 budget fully used	Percent of budget used

Table 14: Performance Management Overview for Section 202 (Time period: First year).

Objective	Year 1 KPIs	Measurement
Section 202		
Identify Areas at high and very high risk to stand-replacing disturbances	Assessment methodology created and aligned with experts	Expert review conducted (workshop or survey)
	(Very) high-risk areas identified	# of areas
	Results and next steps communicated to all 6 regions	Findings shared with regional planning centers
Create post-disturbance planning teams	All necessary contractors hired	yes/no
	Contractors score min. 3 ("good") in USDA Forest Service Contractor Performance Review	(0-5)
	Contractors provide interdisciplinary expertise (academic experts, forestry practitioners)	Team member profiles
	Established open line of communication between contractors and internal federal teams	Calendar with all relevant meetings established and in use
Develop amendment models for existing land & resource management plans	Draft amendment model created	yes/no
	Initial review session on scientific approach	Expert survey with USDA climate hubs
	Initial review session on applicability and future roll-out	Workshop for feedback collection with regional planning centers
Budget	Year 1 budget fully used	Percent of budget used

6.4. MASTER CALENDAR

The following tables summarize the sequencing for Section 102 and 202's tasks and establishes a timeline by which they will be completed. Frequent points of contact will improve inter-agency communication throughout each phase of this Act. Through careful scheduling and resource allocation, the first two years will establish the

fundamental infrastructure necessary for long-term success in revegetation and forest management and help reach the Act's broader ten-year objectives. The regular assessment points and reporting requirements improve accountability and adaptive management as the program progresses.

Section 102, which establishes a comprehensive national revegetation strategy, contains deadlines within the first two years of implementation that have been taken directly from the bill (Table 15). The first year emphasizes organizational structure, the development of an assessment tool, and the initiation of pilot projects. The second year focuses on expanding pilot projects, developing revegetation plans, and establishing

long-term operational frameworks.

Section 202's deadlines within the first two years of implementation have also been taken directly from the bill (Table 15). These main goals include to identify at-risk forest system units within the first year, and to create post-disturbance planning teams and create at-risk forest management plans within two years.

Table 15: Overall Master Calendar for Section 102 and 202 for year one and two

Section 102 Year 1 and 2: Complete Calendar																											
Task #	Task	Pre-Q1		Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
		N	D	J	F	M	A	M	J	Ju	A	S	O	N	D	J	F	M	A	M	J	Ju	A	S	O	N	D
1	Task Force Recruitment																										
2	Create Assessment Tool																										
3	Apply Assesment Tool																										
4	Develop Revegetation Plan																										
5	Pilot Projects																										
6	Annual Report to Congress																										
Section 202 Year 1 and 2: Complete Calendar																											
Task #	Task	Pre-Q1		Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
		N	D	J	F	M	A	M	J	Ju	A	S	O	N	D	J	F	M	A	M	J	Ju	A	S	O	N	D
1	Hiring																										
2	Identify and Categorize Target																										
3	Amendment Models																										
4	Post-Disturbance Management																										



7 | CONCLUSION

This report illustrates the various staffing, budgeting, performance management, and scheduling needs to initiate planning and subsequent implementation of substantial portions of the ARCS Act. This report illustrates the overall design of these programs for the first two years of operation, including deadlines clearly delineated in the text of the bill.

Comparing the annual total of \$39 million for the combined administrative requirements of Section 102 and 202 to the estimated total annual budget of the ARCS Act at approximately \$6 billion, these efforts account for about 0.65% of the available budget for the bill. While this amount of funds is relatively small, it is important to consider that the majority of the remaining funds, staffing, and management requirements would support on-the-ground activities and operations to revegetate the western United States, as well as support all of the other programs of the sections of the ARCS Act not specified in this report.

Still, these administrative and organizational activities will have an important impact on the functioning and operation of the ARCS Act during its 10-year lifetime. More broadly, the ARCS Act increases the funding allocation to the U.S. Forest Service by about one-third, indicating the importance that revegetation and carbon sequestration activities on federal lands would have over the coming decade.



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