



**GEORGIA**  
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

# Expanding Reforestation Projects

Peach State Voluntary Emissions Reduction Studies

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**Reforestation Stakeholder Meeting**  
**September 30, 2025**



# MEETING OBJECTIVES

Georgia EPD is seeking input for its case study on expanding reforestation projects to be included in the Peach State Voluntary Emissions Reduction Studies (PSVERS).

During this meeting, we will:



Provide an overview of the Climate Pollution Reduction Grant (CPRG) program, which is funding the PSVERS



Describe Georgia's emissions reductions planning work to date



Review the details of the proposed initiative to expand reforestation projects



Discuss your comments on the section and changes made to incorporate them



# MEETING ATTENDEES



Government



Academia



Construction



Advocacy and  
Environment

Together, these groups provide varied perspectives. They will inform how the study aligns with existing agency-specific priorities and initiatives, contribute to subject matter knowledge to inform measure planning, provide insights into on-ground implementation realities, and validate environmental benefits and considerations.



# AGENDA

- 1 Overview of the initiative to expand reforestation projects
- 2 Project background
- 3 Quantifying the impact of the reforestation initiative
- 4 Summary of feedback and revisions
- 5 Next steps



# OVERVIEW OF THE STUDY

EPD, in partnership with the Georgia Forestry Commission (GFC), evaluated a **case to support non-industrial private timberland owners to reforest their land following timber harvests**. The PSVERS, funded by the Climate Pollution Reduction Grant (CPRG) program, assesses the potential impacts of this initiative.



## Why is intervention needed?

As private timberland owners experience decreasing returns from logging, they may decide not to reforest and instead leave their land barren or convert it to another land use.

## The importance of preserving Georgia's forests

- Georgia has the second highest acreage of forestland (24.5 million); most is privately-owned timberland.<sup>2</sup>
- Georgia's forestland sequestered 31.8% of gross state emissions (35.8 million metric tons of CO<sub>2</sub>) in 2022.
- Forests also play a major economic role: logging, paper/pulp, biomass, construction, and recreation are all major industries in the state.

### Sources:

1. [Image] Georgia Forestry Commission, Sustainability Report for Georgia's Forests (2024)
2. U.S. Forest Service, Forest Inventory & Analysis



# PROJECT BACKGROUND: PURPOSE AND CONTEXT

The analysis of the initiative to expand reforestation projects was funded by the **Climate Pollution Reduction Grant (CPRG)** program. It will be published as part of the **Peach State Voluntary Emissions Reduction Studies (PSVERS)** in December. This program is overseen by the **U.S. Environmental Protection Agency (EPA)** and Georgia's work is led by the **Environmental Protection Division (Georgia EPD)**.

## Climate Pollution Reduction Grant (CPRG) Overview

- As part of the Inflation Reduction Act, the Climate Pollution Reduction Grant (CPRG) program provided \$5 billion in grants to **states, local governments, tribes, and territories** to develop and implement plans to **reduce greenhouse gas (GHG) emissions and other harmful air pollution**.
- Georgia EPD was awarded a **\$3M planning grant**.
- Atlanta Regional Commission was awarded a **\$1M planning grant**.





# PROJECT BACKGROUND: PSVERS TIMELINE

The analysis of the case to expand reforestation projects will be published as part of the **Peach State Voluntary Emissions Reduction Studies (PSVERS)** in December. The **PSVERS** follows the Peach State Voluntary Emission Reduction Plan (**PSVERP**), published in March 2024, which proposed an initial suite of emissions reduction measures.





# PROJECT BACKGROUND: PROGRESS TOWARDS THE FINAL PSVERS

The PSVERS highlights two emissions reduction measures:

- Landfill Gas to Energy Expansion
- **Reforestation Incentive** } *Focus of today's session*

These measures were selected because of their emissions reduction potential, feasibility of implementation, and alignment with state priorities such as workforce development and emissions reductions.

*Topics for stakeholder review*

EPA requirements for the PSVERS include:

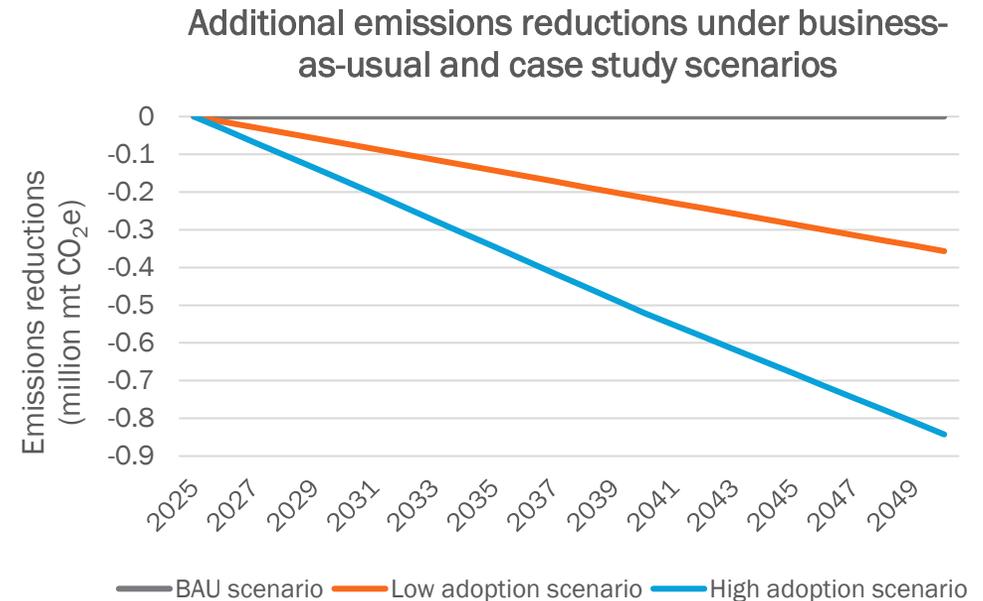
- Statewide emissions inventory
- Emissions projections
- Emissions reduction targets
- For individual emissions reduction measures:
  - Review of authority to implement
  - **Intersection with other funding availability**
  - **Quantified reduction potential**
  - **Benefits analysis (including co-pollutants, climate resilience, and more)**
  - **Workforce planning analysis**



# QUANTIFYING IMPACT: OVERALL METHODOLOGY

The impact of the proposed reforestation incentive is measured as the **difference in carbon sequestered in non-industrial private timberland** between a business-as-usual scenario and a case study scenario with increased reforestation and decreased land conversion. This is estimated as follows:

- 1 Calculate the area of non-industrial private timberland
- 2 Project the rate of timberland loss through 2050
- 3 Estimate the incentive adoption rate and resulting decrease in timberland loss
- 4 Model the difference in private timberland acreage in the case study scenarios
- 5 Calculate the resulting emissions reductions and the difference between business-as-usual and the case study scenarios



*Georgia produced 160.8 million metric tons of carbon dioxide equivalent (CO<sub>2</sub>e) in 2022.*

Sources:

1. Rocky Mountain Institute, Energy Policy Simulator

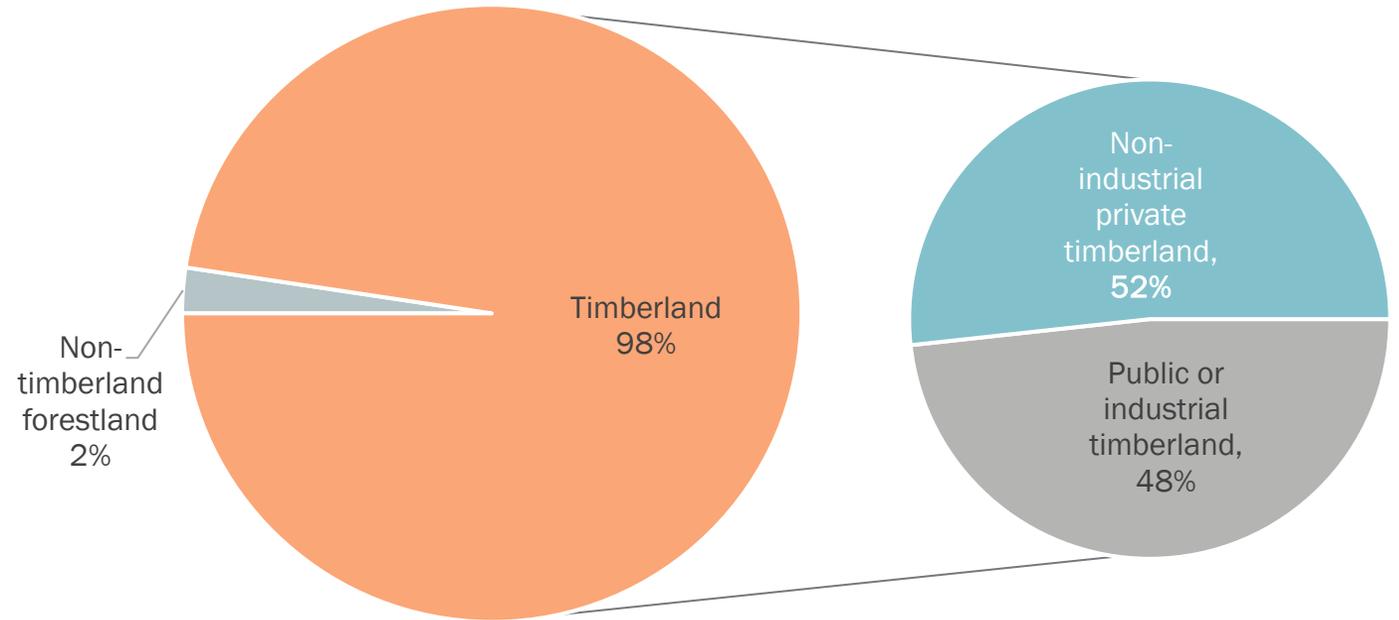


# 1. CALCULATE THE AREA OF NON-INDUSTRIAL, PRIVATE TIMBERLAND

The acreage of non-industrial private timberland in Georgia was calculated using U.S. Forest Service sources.

- Timberland is defined as forestland minus protected lands and any land which is insufficiently productive for timber harvesting.
  - The proportion of non-industrial private forestland (52%) was applied to the total acreage of timberland in the state.
- 2023 GA forestland: 24.1 million acres
  - 2023 GA non-industrial private timberland: 12.2 million acres

Acreage of GA forestland and timberland, 2023



Sources:

1. U.S. Forest Service, Forest Inventory & Analysis



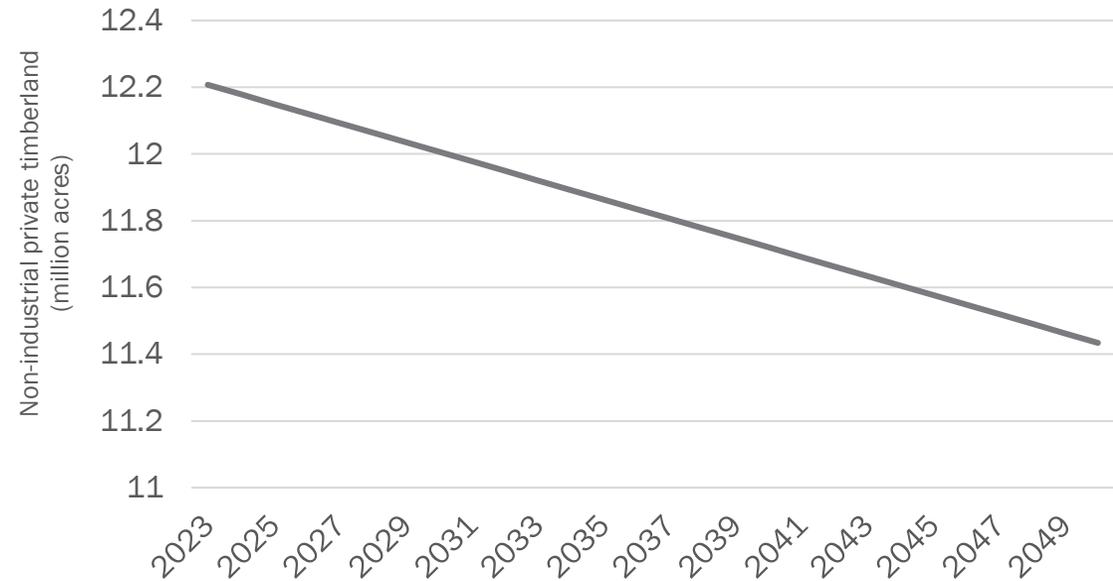
## 2. PROJECT THE RATE OF TIMBERLAND LOSS THROUGH 2050

The historic rate of timberland loss was averaged and projected through 2050.

- U.S. Forest Service timberland acreage data from 2018-2023 was averaged to estimate the future pace of timberland loss.

- Average annual decrease in non-industrial private timberland: 28,647 acres/year

Projected rate of non-industrial private timberland loss in GA



Sources:

- U.S. Forest Service, Forest Inventory & Analysis



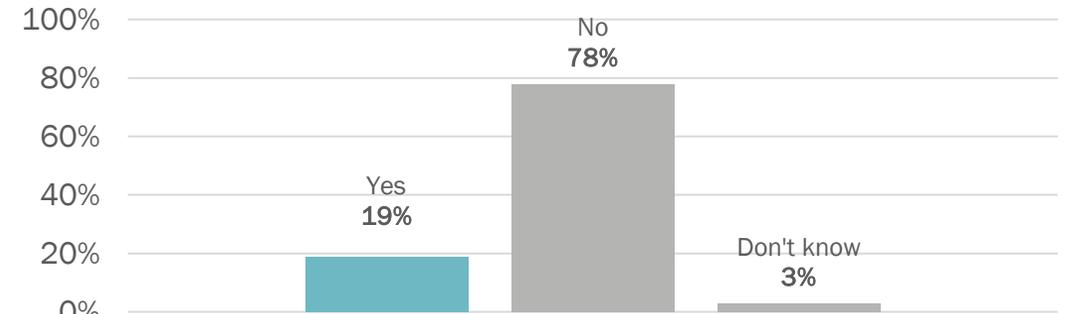
### 3. ESTIMATE THE INCENTIVE ADOPTION RATE AND RESULTING DECREASE IN TIMBERLAND LOSS

The projected reforestation incentive adoption rate and acres reforested were estimated using data from the National Woodland Owners Survey.

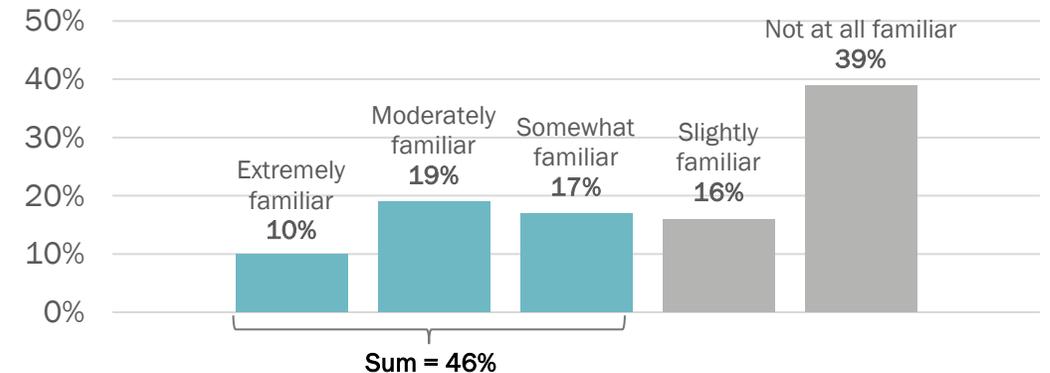
- This data was used to develop a more conservative “low adoption” approach and more ambitious “high adoption” approach.
- The percentage of Georgia family forestland owners enrolled or aware of cost-share programs was used as a proxy for timberland owners expected to enroll in the incentive program and reforest their land after logging.

- **Low adoption:** 19% of eligible timberland will be reforested
- **High adoption:** 46% of eligible timberland will be reforested

Percentage of acres by past enrollment in cost-share programs



Percentage of acres by owner familiarity with cost-share programs



Sources:

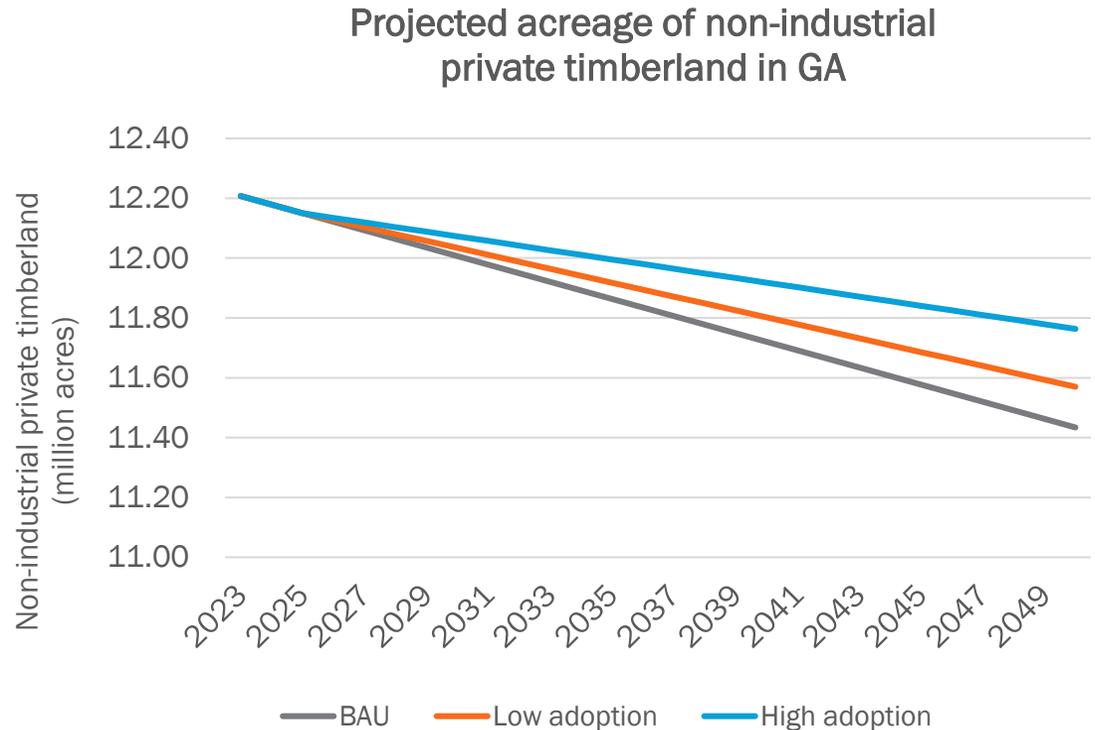
1. U.S. Forest Service, National Woodland Owners Survey



## 4. MODEL THE DIFFERENCE IN PRIVATE TIMBERLAND ACREAGE IN THE CASE STUDY SCENARIOS

The rate of timberland loss under BAU ([step 2](#)) was modified for the case study scenarios using data from the incentive adoption rate ([step 3](#)). The acreage of eligible timberland in 2050 was then calculated using this modified rate of loss and the 2023 acreage ([step 1](#)).

- The acreage of non-industrial private timberland in the state under each scenario was estimated to be:
  - BAU: 11.43 million acres
  - Low adoption: 11.57 million acres (*136,073 additional acres*)
  - High adoption: 11.76 million acres (*329,440 additional acres*)



Sources:

1. U.S. Forest Service, Forest Inventory & Analysis

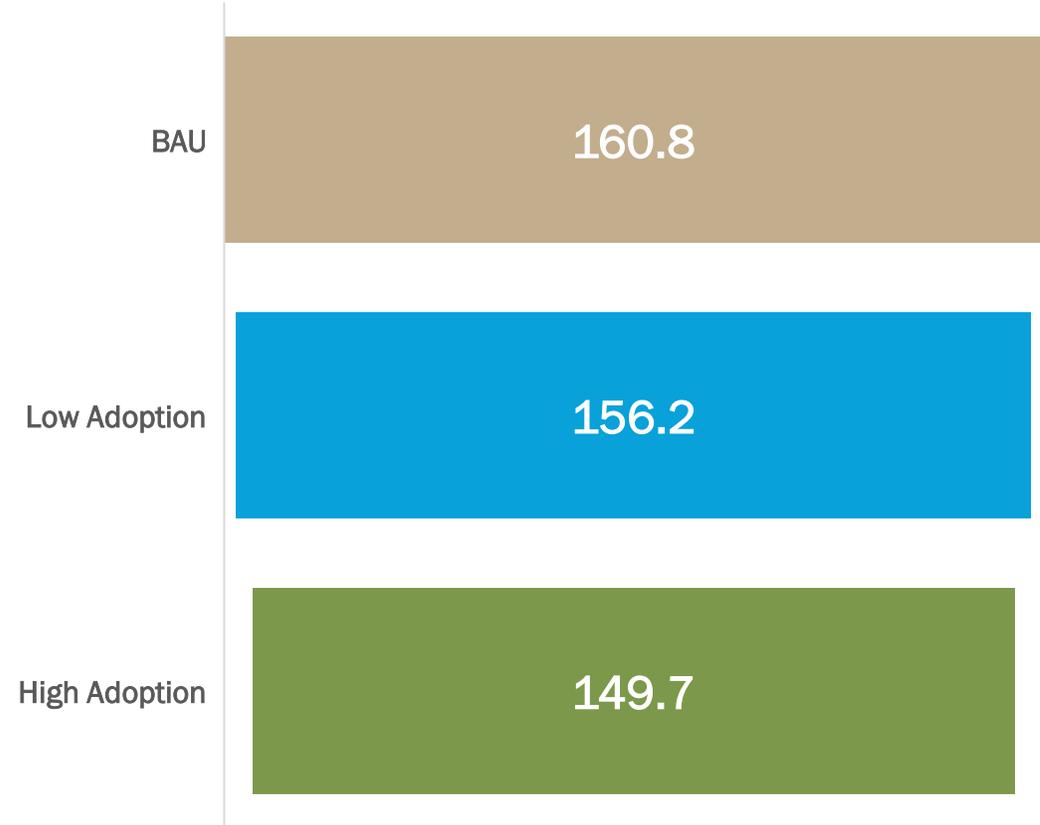


# 5. CALCULATE THE RESULTING EMISSIONS REDUCTIONS BETWEEN THE BAU SCENARIO AND THE CASE STUDY SCENARIOS

Carbon sequestered in timberland was calculated using a Georgia-specific carbon sequestration value from a 2023 research paper.<sup>2</sup> Sequestration under business-as-usual was subtracted from carbon sequestered under the case study scenarios to determine the total reduction potential.

- Emissions reductions under low adoption scenario: 4.6 million mt CO<sub>2</sub>e by 2050 (17.6% over BAU)
- Emissions reductions under high adoption scenario: 11.1 million mt CO<sub>2</sub>e by 2050 (42.6% over BAU)

Estimated statewide emissions under BAU and case study scenarios (million mt CO<sub>2</sub>e)



Sources:

1. Rocky Mountain Institute, Energy Policy Simulator
2. Penn State Extension, The Economic Value of Private Forests and Climate Change Mitigation. February 1, 2023.



# WORKFORCE PLANNING ANALYSIS

## Forestry in Georgia Today

- As of 2024, Georgia has one of the largest forestry sectors in the United States, **employing over 100,000 individuals** in roles such as logging, timber production, forest management, and conservation.
- The forestry industry generates **approximately \$37 billion annually** and supports sectors including tourism and wildlife conservation.
- The industry faces **challenges** such as an aging workforce and a need for training in changing forestry technology (e.g., automation).

## Workforce and Economic Impacts of Reforestation

- Create direct and indirect jobs** in Georgia in the short- and long-term, such as foresters, mill workers and log truck drivers.
- Increase GDP and labor income** in the short- and long-term.

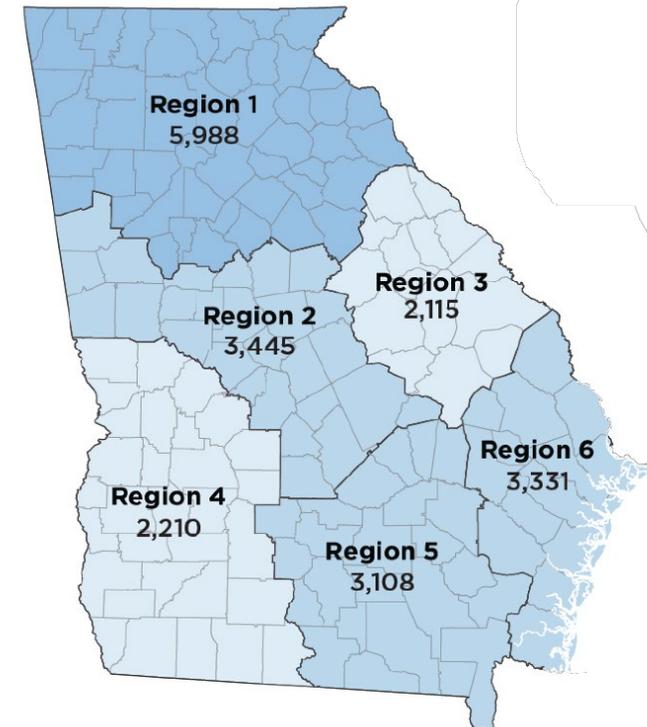
Metric	Financial Impact	
	2025-2030	2025-2050
Jobs added	72 - 167	1,089 - 2,929
GDP added (2024 million USD)	\$10 - \$28	\$245 - \$669
Labor income (2024 million USD)*	\$2 - \$5	\$48 - \$162

Sources:

1. Georgia Forestry Foundation, Georgia Forestry Labor Study

\*Labor income is additional income paid to the additional jobs created from measure implementation.

Projected annual employment need for all primary mill occupations by region, 2026





# ADDITIONAL CO-BENEFITS

In addition to improved financial returns for private timberland owners (families and individuals) and emissions reductions, other benefits of the reforestation incentive include:



## Improved ecological resilience

Forests help to absorb water and maintain soil composition, preventing runoff erosion and flash floods. Maintaining forests, especially in coastal areas, near rivers or low-lying regions, will help to mitigate the impact of flooding in the future.



## Preserving habitats for wildlife

Georgia ranks sixth among all states in biodiversity. Forests in the state are home to numerous threatened species, including 349 high-priority animal species and 291 high-priority plant species.<sup>1</sup>



## Supporting opportunities for recreation

In the 2018 National Woodland Owner Survey, 40% of individual or family respondents stated that recreation was an important or very important use for their land.<sup>2</sup>

### Sources:

1. Georgia Forestry Commission, Sustainability Report for Georgia's Forests.
2. U.S. Forest Service, National Woodland Owners Survey Dashboard

PSVERS

Progress-to-

Date

Q & A



# SUMMARY OF FEEDBACK

Stakeholder feedback was facilitated from September 12 – September 19. Comments from stakeholders were grouped and addressed in the following categories:

1. Alternate uses for converted land
2. Mill closures and job losses
3. Ecosystem services
4. Private funding opportunities
5. Incentives for maintaining timberland

**Thank you for  
your responses!**



# ALTERNATE USES FOR CONVERTED LAND

- Originally the methodology used **single-family housing as a proxy** for all developed land uses.
- Stakeholders suggested considering the **potential of unforested land converted to solar farms** (which do not sequester emissions but also do not produce operational emissions).
- Additional content was added discussing **alternate uses of converted land** and the role of single-family houses as a high-level illustration of emissions potential.

## Additional potential text:

*More land is transitioned to these different land uses under the BAU scenario than the Case Study scenario. Developed land specifically is expected to emit additional GHGs depending on its specific use. To estimate these subsequent emissions, average construction and (annual) operational emissions from a single-family home were used as a proxy. Other uses for converted land are also expected. For instance, solar farms, as electric infrastructure, would be considered developed land. However, solar farms produce no operational emissions and allow for small plant life to continue to grow in the area, much like unforested natural lands. Timberland converted to unforested land used for solar farms would therefore have an emissions reduction impact between that of forested land and developed lands, in addition to the benefits of carbon-free energy generation. Using single-family housing as a proxy to estimate emissions from a portion of converted land is an illustration of the higher range of potential emissions.*



# MILL CLOSURES AND JOB LOSSES

- The workforce analysis section references data and studies from 2022-2024. However, **multiple mills in Georgia announced closures in 2025.**
- Georgia Forestry Commission provided a recent assessment by **Georgia Tech's Enterprise Innovation Institute** to incorporate into the PSVERS.
- This language was added to the PSVERS. It **quantifies losses** from mill closures and compares these figures to **potential workforce and economic benefits** of the reforestation measure.

## Additional potential text:

*The forest industry has also faced recent setbacks, making the potential of this additional investment especially valuable. Georgia Tech's Enterprise Innovation Institute projected up to 1,655 direct job losses from mill closures announced in 2025. This direct impact is projected to result in an additional 5,277 indirect and induced job losses, totaling 6,932 jobs affected. In total, the closures could result in \$564.3 million in labor income losses and a \$2,975.8 million reduction in output and business activity.*

*Companies' decisions to close these mills are in part caused by foreign competition and increased use of recycled wood. Disasters such as Hurricane Helene have also done significant harm to forests and industry in Georgia. Mills are a key component of the forest industry, and while these closures are expected to have significant impacts, additional investment may help mitigate harm to businesses, livelihood, and the economy. Given time and high adoption, a reforestation project such as the one modeled above may offset the job and GDP losses of these mill closures.*



# ECOSYSTEM SERVICES

- One major benefit of forests is **ecosystem services** such as watershed protection, air purification, habitats,
- Stakeholders suggested **calling out these services** and emphasizing that **they benefit more than just landowners**.
- Text to this effect was added, plus a **citation with supporting evidence**.

## Additional potential text:

*Additionally, forests regulate water cycles by facilitating groundwater recharge and maintaining stream flow, which is essential for ecosystems and human communities. They act as natural sponges, absorbing rainfall and releasing it slowly, mitigating the risk of flooding. Forests also help moderate temperatures and humidity levels. These benefits of forests extend not only to landowners but to surrounding communities.<sup>8</sup> Expanding timberland and making its impacts widespread and well-known may also help to protect forests, sequestering more carbon in the process.*

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<sup>8</sup>. *Di Sacco et. al., Ten golden rules for reforestation to optimize carbon. August 25, 2020.*



# PRIVATE FUNDING OPPORTUNITIES

- The Intersection with Other Funding Availability section originally included government funding opportunities, **but no private/corporate opportunities.**
- Stakeholders suggested including these private sources, with **special attention given to carbon markets or structured reforestation programs.**
- This information was added to the relevant section with a **callout for a recent instance of private investment** in Georgia's forests by Netflix.

## Additional potential text:

*Private sector initiatives can also play an important role in funding reforestation, especially as carbon markets become more common. The Fields & Forests program, overseen by the American Forest Foundation, for example, offers landowners an incentive for growing trees on unforested private land. Annual payments are \$30 per acre, and all site preparation and planting costs are covered. The program provides support from foresters and allows landowners to keep all profits from approved thinning and harvesting. The initiative is made possible by the purchase of carbon credits, a mechanism used to track and offset emissions...*

*...By 2032, the Fields & Forests program aims to enroll 75,000 acres, generating an estimated 4.8 million carbon credits and financially supporting family landowners across the Southeast. This market-driven approach to environmental conservation encourages businesses to invest in natural climate solutions that benefit both the planet and local communities. This program requires that land has not been forested for 10 years, making it most relevant to landowners with barren or converted land.*



# INCENTIVES FOR MAINTAINING TIMBERLAND

- The implementation considerations originally suggested the incentive be paid to **landowners reforesting logged land only**.
- This excludes landowners not looking to sell timber and does not consider the **role of markets and mills** in land use.
- The existing incentive example was kept for consistency. However, a note was added on **other incentive designs**.
- A paragraph was added noting the **importance of markets and mills** and potential means to support new mills.

## Additional potential text:

*Reforestation projects are not a replacement for strong timber markets. While reforestation projects ease the economic burden felt by timberland owners, timber markets make timberland management feasible as a livelihood. Georgia remains a leading forestry state, however the forestry sector has faced economic setbacks, weakening demand for local timber and decreasing returns for timberland owners. Additional investment by companies and mills may be necessary to incentivize planting new forests. Projects supporting this increased investment and strengthening Georgia's forest industry are therefore also highly valuable to the state.*

In designing a reforestation incentive, there are several considerations...  
*...This incentive may function differently for other programs. A project supporting carbon markets might pay landowners for maintaining forestland rather than reforesting timberland, for instance. This type of incentive would allow participation by landowners who do not plan to harvest timber.*

Stakeholder  
Feedback

Q & A



# NEXT STEPS

1

## Stakeholder Input Addressed, Engagement Closes

- Stakeholders have had the opportunity to provide feedback during the comment period and feedback has been reviewed.

### Next steps

2

## EPD Review

- EPD will review a completed draft of the PSVERS with its leadership.

3

## Prepare Final Draft of PSVERS

- Draft document will undergo internal review and then a final pass for content and design.

4

## PSVERS Due to EPA

- EPD will submit the PSVERS to EPA by December 1, 2025.



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