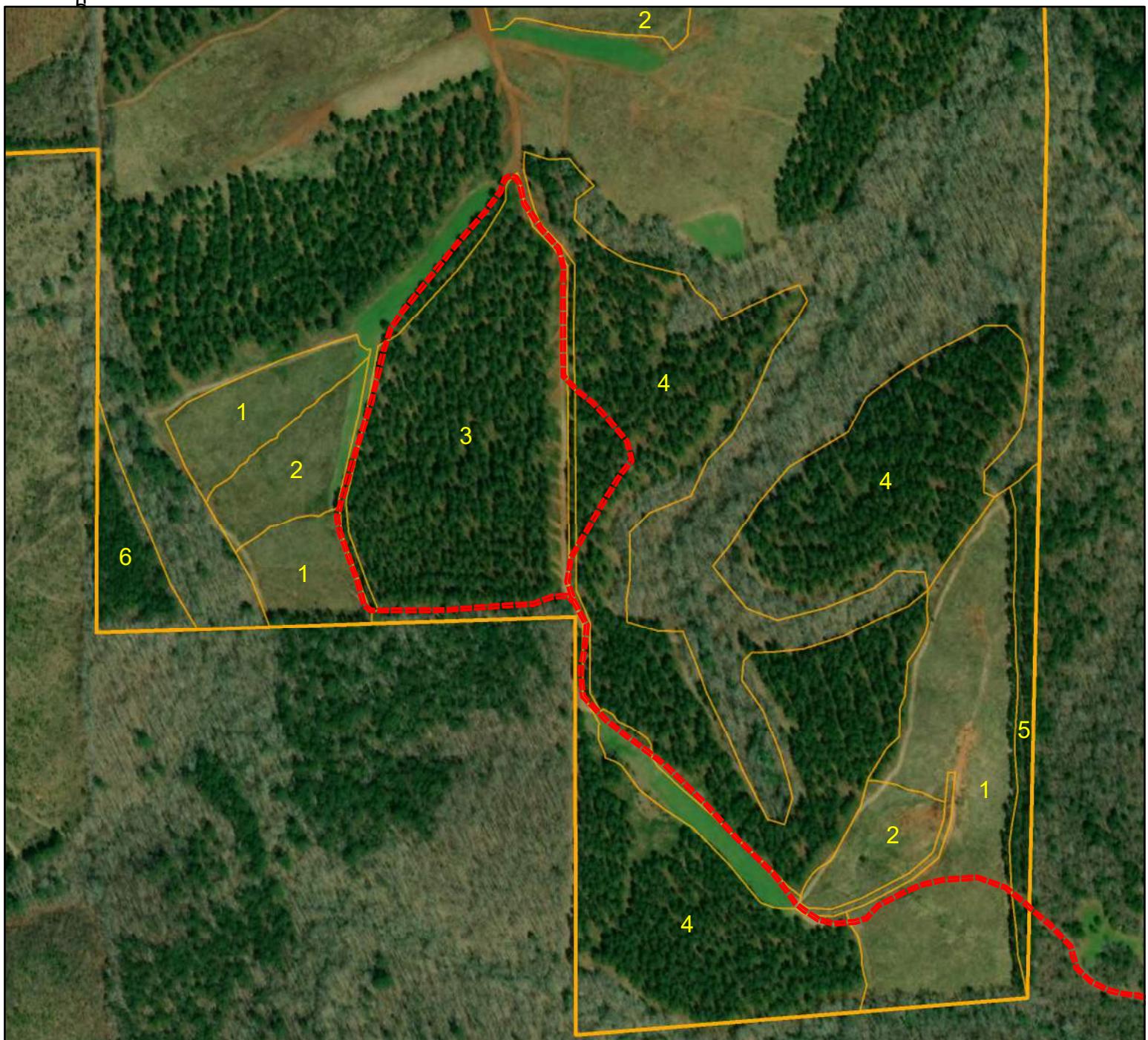


AFOA Forestry Field Tour- July 22, 2020

“Forest Management: Making the best decisions for YOUR objectives”

- Landowner objectives for the property: 1) Wildlife 2) Aesthetics, and 3) Timber
 - to promote quality turkey, quail and deer habitat through good forest management
- All pine plantations were densely stocked, approximately 14 years old at first thinning
- First thinned in 2010
 - objective to open canopy and get food/cover on the ground for wildlife and to promote growth of residual pines
- Mid-rotation herbicide treatment
 - To control sweetgum and midstory hardwood competition, good for wildlife and timber production- \$50-\$65 per acre depending on prescription and application methods
- Second thinning and patch clear cuts in 2015
 - objecitve to avoid canopy closure for wildlife and promote tree growth, patch clear cuts for diversity, nesting, bedding cover.
- Longleaf plantings-chosen for wildlife benefits, early prescribed burning
 - Site prep 2016, planted 2017
 - Approximate cost
 - Herbicide \$85/acre
 - Prescribed Burning/Firebreaks \$50/acre
 - Container longleaf seedlings \$110/acre
 - Planting labor \$60/acre
 - Total cost = \$305/acre, 544 trees/acre
 - Possible cost-share opportunities through NRCS, longleaf alliance
 - Herbaceous weed control spring after planting
- Extensive inventory July 2020 to project and evaluate growth rates and internal rate of return
- Prescribed burning on a 2-4 year return interval, checkerboard across landscape
 - Winter versus growing season burning depending on objectives

Forest Management Activities Map
Tallapoosa County, AL



----- Tour path

AFOA tour map

STAND_DESC, Comments

- 1, 2017 Longleaf planting-burned winter 2019
- 2, Herbicide only-early successional habitat
- 3, 1996 Loblolly-Thinned Twice- Herbicide-Winter Burn 2020
- 4, 1996 Loblolly-Thinned Twice-Herbicide,-June Burn 2020
- 5, 1996 Loblolly-Thinned Once
- 6, 1996 Loblolly-Unthinned

Pine Plantation Management Presentation AFOA Field Tour

2/22/2020

Stand Identification

| | | | |
|--------------|------------|-----------------------|---------------------|
| Client Name | AFOA | Establishment Cost | \$200 per acre 1996 |
| County | Tallapoosa | Annual Operating Cost | \$5.00 per acre |
| Estab. Date | 1/15/1996 | Recreation Income | \$8.00 per acre |
| Site Quality | 70 Feet | | |

Harvest Product Rates

\$7.00 \$14.50 \$20.00

| Stand Name | Loblolly Plantation Age 25 Unthinned | | | | | Yield Unit: OB Green Tons | PW CNS PST | | | Chip-N-Saw | | | Sawtimber | | | Value Per Acre | Internal Rate of Return |
|------------|--------------------------------------|------------|---------|-------|-------------|---------------------------|---------------|---------------|----------------|------------------|-------|----------|-----------|----------|------------|----------------|-------------------------|
| | Dom Ht | Trees/Acre | BA/Acre | QMD | Total Yield | | Tot. Gr. Rate | Topwood Yield | Pulpwood Yield | PW & TW Gr. Rate | Yield | Gr. Rate | Yield | Gr. Rate | | | |
| 2021 | 25 | 71.2 | 610.0 | 219.9 | 8.1 | 184.3 | 3.5 | 135.6 | 0.0 | 45.2 | 0.0 | 0.0 | 0.0 | 0.0 | \$1,629.10 | 9.50% | |
| 2022 | 26 | 73.0 | 585.5 | 221.7 | 8.3 | 190.4 | 3.31% | 4.0 | 132.5 | -2.29% | 53.9 | 19.25% | 0.0 | 0.0 | \$1,737.05 | 9.40% | |
| 2023 | 27 | 74.8 | 562.2 | 223.0 | 8.5 | 196.0 | 2.94% | 4.6 | 129.0 | -2.64% | 62.4 | 15.77% | 0.0 | 0.0 | \$1,840.00 | 9.28% | |
| 2024 | 28 | 76.6 | 540.1 | 223.9 | 8.7 | 201.1 | 2.60% | 5.1 | 125.3 | -2.87% | 70.7 | 13.30% | 0.0 | 0.0 | \$1,937.95 | 9.15% | |
| 2025 | 29 | 78.3 | 519.0 | 224.4 | 8.9 | 205.8 | 2.34% | 5.7 | 121.3 | -3.19% | 78.8 | 11.46% | 0.0 | 0.0 | \$2,031.60 | 9.01% | |
| 2026 | 30 | 80.0 | 499.0 | 224.7 | 9.1 | 210.1 | 2.09% | 6.2 | 117.2 | -3.38% | 86.8 | 10.15% | 0.0 | 0.0 | \$2,122.40 | 8.87% | |

Stand Name Loblolly Plantation Age 25 Thinned at Age 14

Yield Unit: OB Green Tons

Thinned 46.55 Tons Per Acre pulpwood \$279.32 per Acre

| Stand Name | Loblolly Plantation Age 25 Thinned at Age 14 | | | | | Yield Unit: OB Green Tons | Thinned 46.55 Tons Per Acre pulpwood \$279.32 per Acre | | | Chip-N-Saw | | | Sawtimber | | | Value Per Acre | Internal Rate of Return |
|------------|--|------------|---------|-------|-------------|---------------------------|--|---------------|----------------|------------------|-------|----------|-----------|----------|------------|----------------|-------------------------|
| | Dom Ht | Trees/Acre | BA/Acre | QMD | Total Yield | | Tot. Gr. Rate | Topwood Yield | Pulpwood Yield | PW & TW Gr. Rate | Yield | Gr. Rate | Yield | Gr. Rate | | | |
| 2021 | 25 | 68.7 | 255.0 | 99.8 | 8.5 | 80.6 | 1.8 | 56.5 | 0.0 | 22.4 | 0.0 | 0.0 | 0.0 | \$732.90 | 9.03% | | |
| 2022 | 26 | 70.5 | 252.0 | 104.0 | 8.7 | 85.9 | 6.58% | 2.4 | 52.4 | -7.26% | 31.1 | 38.84% | 0.0 | 0.0 | \$834.55 | 9.15% | |
| 2023 | 27 | 72.2 | 249.0 | 107.8 | 8.9 | 90.9 | 5.82% | 3.1 | 48.4 | -7.63% | 39.5 | 27.01% | 0.0 | 0.0 | \$933.25 | 9.22% | |
| 2024 | 28 | 73.9 | 245.9 | 111.2 | 9.1 | 95.7 | 5.28% | 3.7 | 44.4 | -8.26% | 47.6 | 20.51% | 0.0 | 0.0 | \$1,026.90 | 9.25% | |
| 2025 | 29 | 75.5 | 242.9 | 114.4 | 9.3 | 100.3 | 4.81% | 4.3 | 40.6 | -8.56% | 55.4 | 16.39% | 0.0 | 0.0 | \$1,117.60 | 9.24% | |
| 2026 | 30 | 77.1 | 239.9 | 117.8 | 9.5 | 105.2 | 4.89% | 5.0 | 36.7 | -9.61% | 62.6 | 13.00% | 0.0 | 0.0 | \$1,199.60 | 9.24% | |

Stand Name Loblolly Plantation Age 25 Thinned at Age 14 and 19

Thinned 30 Tons Pulpwood and 5 Tons C-N-S per acre, \$284.40 per Acre

| Stand Name | Loblolly Plantation Age 25 Thinned at Age 14 and 19 | | | | | Thinned 30 Tons Pulpwood and 5 Tons C-N-S per acre, \$284.40 per Acre | Chip-N-Saw | | | Sawtimber | | | Value Per Acre | Internal Rate of Return | | |
|------------|---|------------|---------|------|-------------|---|---------------|---------------|----------------|------------------|-------|----------|----------------|-------------------------|------------|--------|
| | Dom Ht | Trees/Acre | BA/Acre | QMD | Total Yield | | Tot. Gr. Rate | Topwood Yield | Pulpwood Yield | PW & TW Gr. Rate | Yield | Gr. Rate | Yield | Gr. Rate | | |
| 2021 | 25 | 72.8 | 109.0 | 76.5 | 11.3 | 63.8 | 6.0 | 2.8 | 0.0 | 40.7 | 0.0 | 14.4 | 0.0 | \$939.75 | 11.06% | |
| 2022 | 26 | 74.7 | 109.0 | 80.2 | 11.6 | 69.1 | 8.31% | 6.4 | 3.0 | 7.14% | 41.9 | 2.95% | 17.8 | 23.61% | \$1,029.35 | 11.03% |
| 2023 | 27 | 76.5 | 109.0 | 83.6 | 11.9 | 74.3 | 7.53% | 6.9 | 3.2 | 6.67% | 43.0 | 2.63% | 21.1 | 18.54% | \$1,116.20 | 10.99% |
| 2024 | 28 | 78.3 | 108.9 | 86.7 | 12.1 | 79.3 | 6.73% | 7.4 | 3.4 | 6.25% | 44.1 | 2.56% | 24.4 | 15.64% | \$1,203.05 | 10.94% |
| 2025 | 29 | 80.1 | 108.9 | 89.9 | 12.3 | 84.4 | 6.43% | 7.8 | 3.6 | 5.88% | 45.2 | 2.49% | 27.8 | 13.93% | \$1,291.20 | 10.88% |
| 2026 | 30 | 81.8 | 108.9 | 93.5 | 12.6 | 89.8 | 6.40% | 8.7 | 3.9 | 8.33% | 42.9 | -5.09% | 34.2 | 23.02% | \$1,394.25 | 10.83% |

If Chip-N-Saw and sawtimber prices Increase \$2.00 per ton in by 2026 comparable values and return

\$1,548.45 11.03%

If Chip-N-Saw and sawtimber prices Increase \$4.00 per ton in by 2026 comparable values and return

\$1,702.65 11.22%

If Chip-N-Saw and sawtimber prices Increase to current Northeast Florida Prices

\$2,376.80 11.92%