**Supplementary Information**

**Title**

Economics of Southern Pines with and without Payments for Environmental Amenities in the Southern United States

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Figure S1: Breakup of land expectation value (LEV) for loblolly, slash, and longleaf pines at the optimal rotation age with no income from pine straw raking.



Figure S2: Breakup of land expectation value (LEV) of income and costs for slash, and longleaf pines at the optimal rotation age with income from pine straw raking.



Table S1: Carbon and Water yield for loblolly, slash and longleaf pines across site indices without income from pine straw raking.

|  |  |  |  |
| --- | --- | --- | --- |
|   | Scenario 1 | Scenario 2 | Scenario 3 |
| Species | SI (m) | Carbon (t/ha) | Water Yield (mm) | Carbon (t/ha) | Water Yield (mm) | Carbon (t/ha) | Water Yield (mm) |
| Loblolly | 24.4 | 195.8 | 487.8 | 203.6 | 485.1 | 203.6 | 485.1 |
| 21.3 | 173.4 | 494.7 | 179.3 | 492.9 | 179.3 | 492.9 |
| 18.2 | 149.4 | 504.8 | 153.8 | 504.0 | 153.8 | 504.0 |
| Slash | 24.4 | 463.4 | 484.9 | 509.5 | 478.1 | 495.0 | 480.1 |
| 22.8 | 449.0 | 485.8 | 490.2 | 480.8 | 477.3 | 482.2 |
| 19.8 | 393.7 | 501.0 | 427.2 | 498.0 | 416.7 | 498.8 |
| Longleaf | 18.2 | 174.8 | 383.2 | 199.6 | 376.9 | 205.7 | 374.7 |
| 15.2 | 133.5 | 409.0 | 159.0 | 403.3 | 152.2 | 404.1 |
| 13.7 | 108.2 | 432.8 | 121.0 | 429.9 | 121.0 | 429.9 |

Table S2: Carbon and Water yield for slash and longleaf pines across site indices with income from pine straw raking.

|  |  |  |  |
| --- | --- | --- | --- |
|   | Scenario 4 | Scenario 5 | Scenario 6 |
| Species | SI (m) | Carbon (t/ha) | Water Yield (mm) | Carbon (t/ha) | Water Yield (mm) | Carbon (t/ha) | Water Yield (mm) |
| Slash | 24.4 | 428.2 | 491.3 | 482.3 | 482.3 | 479.7 | 482.3 |
| 22.8 | 400.0 | 493.8 | 485.8 | 485.8 | 449.0 | 485.8 |
| 19.8 | 353.8 | 506.0 | 501.0 | 501.0 | 381.1 | 502.4 |
| Longleaf | 18.2 | 52.4 | 470.5 | 418.5 | 418.5 | 80.7 | 443.7 |
| 15.2 | 52.4 | 470.5 | 432.8 | 432.8 | 80.7 | 443.7 |
| 13.7 | 36.9 | 489.8 | 444.1 | 444.1 | 87.1 | 444.1 |