

Forest Management Plan Template

The Forest Management Plan is helpful to the Agriculture/Greenbelt classification process. Inspecting Appraisers who conduct initial certifications and re-inspections are responsible for making sure that the parcel is being used as **"Bona-fide Agriculture" per FS 193.461**. The quality and completeness of a Forest Management Plan go a long way in providing useful documentation that the Land Owner indeed meets the requirements necessary for the Agriculture/Greenbelt Classification.

Toward that end, the Nassau County Property Appraiser has developed a template that can be used in the development of Forest Management Plans. The template is intended as a helpful guide and is not a statutory requirement in itself. It contains all of the major sections required in Tree Farm Management Plans according to the Florida Forestry Standards of Sustainability for Forest Certification. It can be tailored to forester or land owner preferences and individual Tree Farm differences.

Management Plans vary considerably from region to region, from state to state, from forester to forester-and they also vary in length and depth with the size and scale of the property. This template may not ideally match state and other program criteria or it may not fit a particular forester's style. It simply provides an outline that fairly well encompasses the elements in determining the "Bona-fide Agriculture" status. The template can be modified accordingly to better fit geographic and personal preferences.

Forest Management Plans developed without the use of this template are perfectly acceptable.

Forest Management Plan

Parcel ID# _____

Nearest Town or City _____ County _____

Total ownership acreage _____ Total forested acreage _____

Is there a home on the property? _____ Landowner reside on property? _____

Landowner:

Name _____

Address _____

Phone _____

E-Mail _____

Plan Prepared By:

Name _____

Address _____

Phone _____ E-mail _____

Date of Plan:

Landowner's signature confirms that management activities will be conducted in accordance with this proposed Forest Management Plan.

Landowner's Signature _____ Date _____

Aerial Parcel Map with stand lines delineated on this page.

Aerial parcel maps can be found at www.nassauflpa.com

or www.googleearth.com

Sustainable Forest Management Plan

Management plans are active, adaptive, and embody the owners' current objectives, remain appropriate for the land classified as "Bona-fide Agriculture", and reflect the current state of knowledge about forestry and natural resources management.

Section 1 - Landowner Goals: (short- term & long-term)

Section 2 - Management Objectives: (Present & Future)

- 1) Wood and Fiber production: _____
- 2) Wildlife habitat: _____
- 3) Water quality: _____
- 4) Recreation: _____
- 5) Other: _____

Section 3 - Stand Description Overview:

Stand descriptions include: acreage, soil condition, species, age, special sites, etc.

Total # of Stands: _____

Stand 1: _____

Stand 2: _____

Stand 3: _____

Stand 4: _____

Section 4 - Management Implementations:

Management recommendations address Florida's Silviculture Best Management Practices for forestry to ensure sustainable forests.

- 1) Harvest Method: _____
- 2) Stand Improvement: _____
- 3) Reforestation: _____
- 4) Wildlife: _____
- 5) Water and Soil Protection: _____
- 6) Recreation/Access: _____

Section 5 - Management Timetable:

List below the primary management activities that should be implemented over the next 10-100 years.

<u>Year</u>	<u>Season</u>	<u>Stand#</u>	<u>Management Activity</u>

Section 6 - Attached General Forestry Information that may be useful.

General Forestry Information

Cost Share: Government incentive programs are often available to private timberland owners to encourage better forest management. Presently, the Florida Forest Service offers the Southern Pine Beetle Prevention Program to pay qualifying landowners a set rate for completing practices (on a minimum of 10 acres) like a burning or mowing under pine stands, thinning pine stands, or planting pine seedlings. The USDA also offers forestry cost share assistance through programs like WHIP or EQIP at (904) 266-0088.

Thinning: Timber thinning can improve growth rates for stands managed for products like chipnsaw, sawtimber, veneer, or poles. A thinning usually involves removing about half the trees, while attempting to leave the best ones behind to maximize the future growth on mainly lumber-quality trees. Thinning additionally improves the aesthetics, reduces underbrush, improves access, increases visual penetration into the stand, etc. Less underbrush also means less wildfire danger. Thinning will also allow more sunlight penetration, to increase forage material for livestock or wildlife.

Another obvious benefit is that thinning will provide periodic income at more frequent intervals. A first thinning might occur in planted pines around age 15 or 20. A second thinning may be necessary in maybe 7 years, provided it was not thinned too heavily. A third thinning may be appropriate in perhaps 12 years. As trees get older, they grow slower, and thinning intervals will grow farther apart. At some point a clearcut should occur to begin a new, vigorous forest.

Natural Regeneration: A seed tree cut is a harvest / reforestation option, where everything is harvested, except 8 to 15 mature, cone-bearing pines per acre. Most seeds fall closer to the tree, but generally they can be expected to travel 3 times farther than the tree is tall. If sufficient regeneration does not occur within a few years, the site may need to be burned or cleared prior to seed fall in October or November. The overstory is often harvested after sufficient regeneration occurs, but of course, some seedlings will be damaged. In the end, a good number of seedlings would be 400 to 800 per acre. Sites harvested immediately before seed fall (October/November) often regenerate best due to the exposed soil.

Site Prep: A proper site preparation allows for easier planting and can greatly increase survival and growth. Scalping, or removing a thin layer of sod, is one of the best treatments for planting old fields. For preparing cutover sites for machine planting, burning and/or mechanical preparation(s) like chopping, raking, and bedding are often utilized. If no mechanical preparation occurs, the site may need to be v-blade planted or hand planted. A herbicide application may follow mechanical treatments or precede burning. The right herbicides can keep unwanted competition suppressed for a few years while the pines get off to a great start.

Planting: Seedlings should be reserved in summer to ensure availability for a winter planting. If the site was harvested after June, do not plant the first winter to avoid damage by weevils. If beds are used, they need to settle about 60 days before planting. Spacing options are diverse, but as a suggestion, trees 5 feet apart and rows 12 feet apart will yield 726 trees per acre. Alternatively, 6x12 feet = 605, and

7x12=519 trees per acre. I suggest using bareroot slash pine or possibly loblolly pine because they grow quickly and are relatively cheap. Keep in mind that pines require direct sunlight.

Longleaf Pine: Many people don't plant longleaf pine seedlings because they cost more, require thorough site prep, and have a reputation for growing slower. However, in the long run, longleaf wood is heavier and it can yield many times more poles than other pine species. When explorers first visited Florida, they found vast longleaf pine forests with little underbrush, as a result of their resistance to frequent lightning fires. Since longleaf stays in a "grass stage" for a couple of years, it can become suppressed by weeds in the absence of fire. Using herbicides is an effective remedy to encourage survival and early vertical growth. Using containerized seedlings and planting with buds slightly above the soil can also help. More information can be found on the Longleaf Alliance website.

Firelines and Control Burning: Prescribed fire is a great tool to maintain pine stands and accomplish landowner objectives. It reduces the risk of wildfire, and top-kills competing vegetation. It is especially helpful in improving aesthetics and wildlife habitat. Fire promotes forage material at the ground level, increases seed production, perpetuates fire dependent species, improves access, enhances the appearance, and releases nutrients from burned fuels like calcium and phosphorus.

The downside to burning is that some nitrogen can be volatilized (into the air) and some nutrients can be released in inorganic forms not readily available to plants. In addition, nutrients may be more susceptible to leaching than if the organic matter decomposed naturally. The mulch consumption may also lead to slightly drier soils.

The Florida Forest Service can install firelines for \$108 per hour and conduct burning for \$20 per acre. Although many people forgo these services, we recommend annual fireline maintenance and control burning every 2-4 years unless timber harvesting or other fuel reduction has occurred.

Mowing or Disking Rows, Openings, and Transitions: Mowing between pine rows can accomplish many of the same benefits as burning. Mowing can especially be helpful in newly planted areas where fire can't be used. In older stands, consider staggering or "rotationally mowing" between a few rows and then skipping others to improve nesting and cover for ground nesting birds like quail and turkey. In a year or two, mow different rows.

Mowing may also be used to maintain permanent wildlife openings or logging decks. Openings can also be disliked into strips and planted or left to naturally regenerate. Transition zones between uplands and lowlands are preferred by many common and rare species. They should be protected from plowing and maintained if possible by disliking, burning, or mowing.

Forestry BMPs: Florida's Silviculture Best Management Practices provides detailed guidelines for protecting soil and water quality during forest management activities. If harvesting is desired in lowland areas, dry seasons should be utilized, and at least 3-5 trees should be left per acre. A perennial stream (seldom dried up) should not be clearcut within 35 feet of the main channel; it may be thinned by 50% if desired, provided none are cut along the flow-way. If a site has a high erosion potential, such as with a steep slope or with a wide creek, this zone should be wider. An intermittent stream (frequently dries up)

only needs a stringer or trees left down the center. For the benefit of wildlife, favor hollow, mast-producing hardwoods or snags (standing, dead trees), particularly in these wet areas.

Soil & Water: Soil and water conservation is important to consider during land management activities. Check the web soil survey to determine your soil type or the Soil Survey of Nassau County, Florida for detailed information for each soil type. Keep in mind that new forest road construction or constructing roadside ditches on existing forest trails requires filing a Notice of Intent to Construct a Minor Silviculture System with the St. Johns River Water Management District at (904) 730-6270. Specific questions about soils may be directed to the USDA's Natural Resources Conservation Service (NRCS) in Baldwin at (904) 266-0088.

Insects & Disease: The major pine diseases (fusiform rust and sometimes pitch canker) can be minimized by planting resistant varieties from seedling nurseries. The best strategy to prevent pine beetles is to keep pines healthy and vigorous by thinning overstocked stands and avoiding mechanical injury to trees and roots.

Unwanted Plants: Non-Native, invasive species can negatively impact forests and become a nuisance to landowners. Chinese tallow, Japanese climbing fern, cogon grass and others can be unwittingly acquired through fill material, hay, logging equipment, wind, wildlife, etc. Guarding against unwanted plants consists of prevention, early detection, and a rapid response (often involving herbicides).

Timber Prices and Vendors: South-wide timber prices may be obtained online from Timber Mart South or a more detailed regional report may be found in the current issue of The Florida Forest Steward. Be aware that large timber products are currently down in value, but pulpwood is doing very well. Also, timber prices are usually higher than average in the Jacksonville area due to the close proximity of mills. Sample timber contracts, forestry consultants, timber buyers, site prep contractors, seedling nurseries, tree planters, and other forestry vendors may be found online.