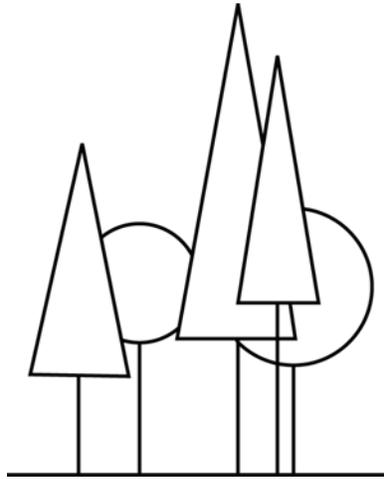


**LEVY COUNTY, FL
MANAGEMENT PLAN**



Prepared for:
Progress Energy

Prepared by:
American Forest Management, Inc.

Introduction

This Management Plan represents the long-term strategy for managing a portion of the land and timber asset of Progress Energy. The timberlands are comprised of approximately 5,469 acres located in the Levy County, Florida. A map of the property is located on the following page.

The overall goal of Progress Energy is to manage these lands based on a multiple resource management concept. This includes timber production, wildlife, aesthetics, and recreational opportunities.

The property is located in an area that enjoys stable markets for wood products, as well as an expanding population which creates opportunities for multiple use management.

The management plan is intended to outline the major forest management strategies on the property and provide a framework for annual budgeting. This document will be updated periodically, as needed, to reflect changes in management strategy or the timberland asset.

Property History

The property has been managed for timber production and recreation for several years. The property was recently acquired by Progress Energy from Rayonier. Prior to Rayonier, the property was held in private ownership.

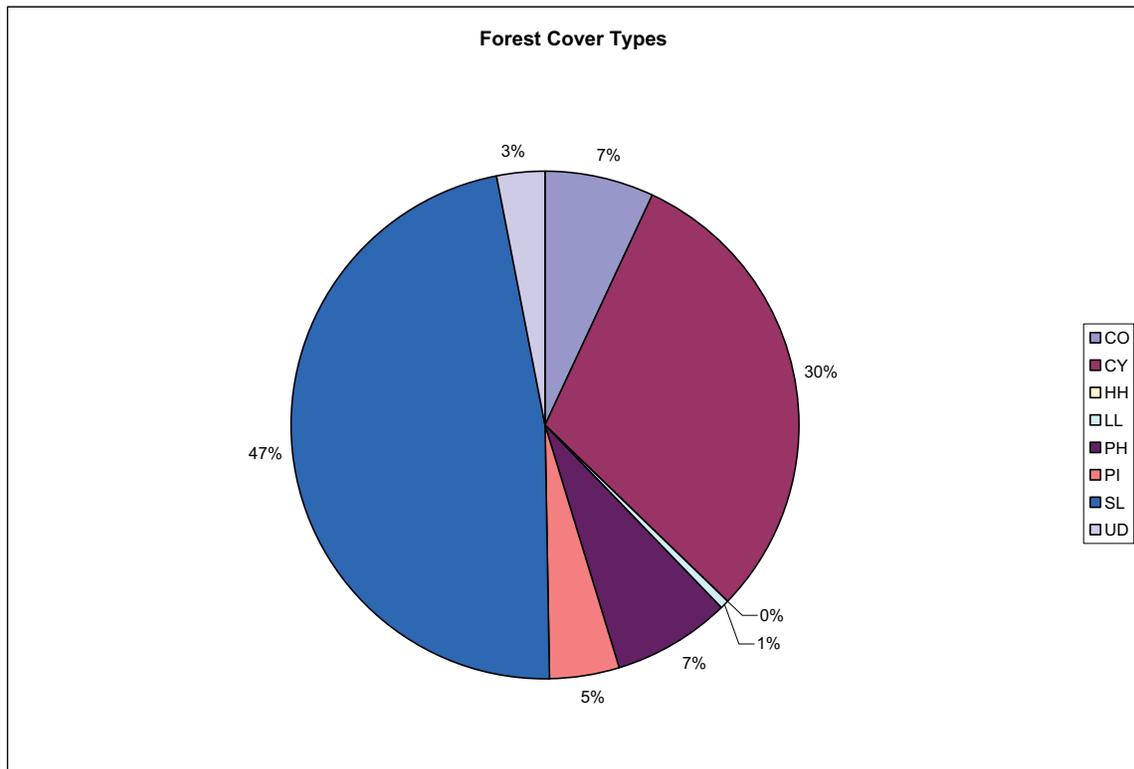
The current use of the property is for timber production within the multiple use concept of Progress Energy.

Property Description

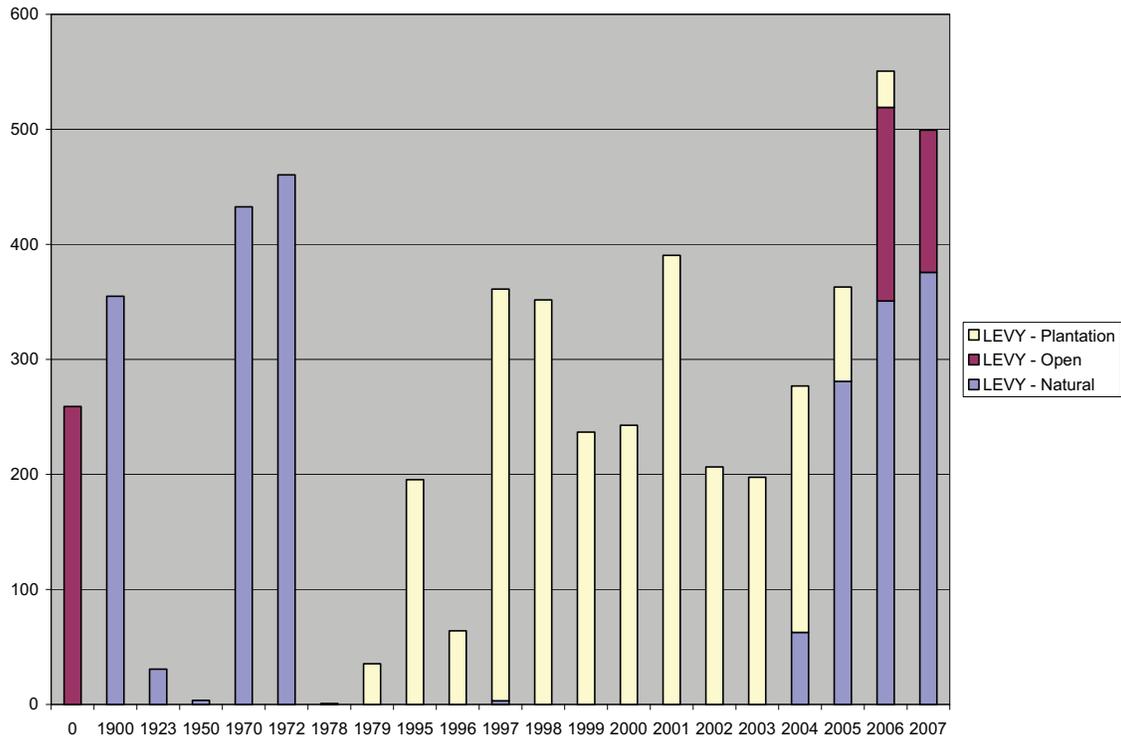
The forest structure of the property has been developed over several years of forest management regimes to help meet local mill demands. The charts located below and on the following pages describe the property's composition and product breakdown. Currently the upland portions of the property have been converted to plantation management.

Of the upland acres in plantation management, 48% are in pine plantation.

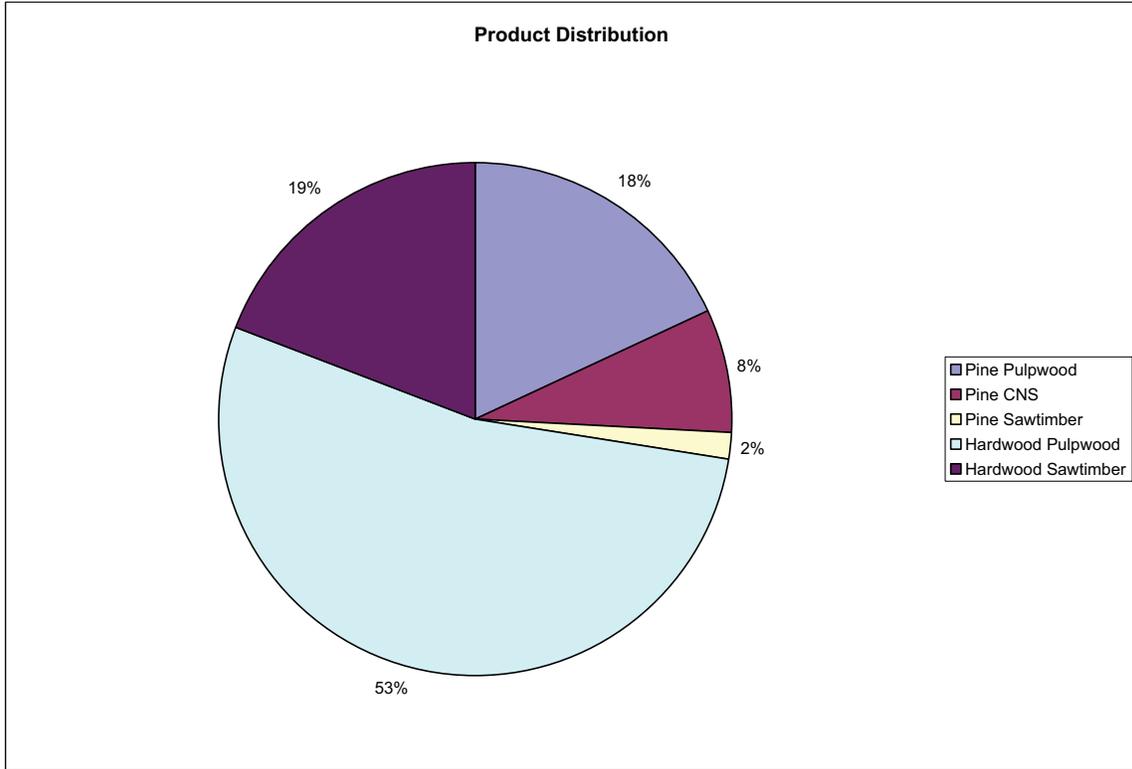
Slightly over 43% of the property is currently in natural management with 70% of the natural management in hardwood and the remaining in pine.



The age class distribution shown below demonstrates a diversity of ages in the current forest structure. The plantation management program began in the late 1970's and has continued where appropriate. The older age classes represent the natural hardwood stands which have been managed at a relatively low intensity over the years.



The current product distribution for the pine component of the property has a typical product breakdown for lands under forestry management. About two-thirds of the property is in hardwood pulpwood or hardwood sawtimber because of the forest structure of the age class distribution.



Management Strategies

The management strategy for the property is to maximize the net present value within the constraints of Progress Energy’s objectives. To accomplish this, a harvest scheduling model is used to project future timber harvests, inventories and cash flows from the property under varying regimes to determine which approach will meet the needs and provide the best return. The details of this schedule are located in “Maps” section and consist of a property level report with detailed tract level maps indicating activities at the timber stand level. There will be a conversion from natural management to pine plantation management where appropriate. However, this property has a significant acreage that will remain in natural management. These areas include cypress stands and bottomland hardwood areas.

The hardwood natural areas represent about 50% of the property acres. These acres are less intensively managed, and provide for a diversity of habitat.

Under typical management strategies, Progress Energy intends to harvest timber, within best management practices guidelines to insure future productivity of the timberland. These practices are aimed at maintaining water quality, wildlife habitat, and overall health of the timberlands. In addition, measures for property security will be followed to protect the property.

Strategic Harvest Schedule

The strategic harvest schedule is developed using a linear programming model with spatial capability to maximize the net present value (NPV) of the future cash flows. The model projects the entire forest into the future for 30 years, while calculating the financial maturity of each timber stand. These projections are then used to gauge the optimal solution against the constraints applied. The overall result is a schedule that meets management objectives, while maximizing the net present value of the asset. The model has the ability to select treatments based on NPV. These include fertilization, thinning, site preparation and planting, final harvest. These activities can be controlled based on the constraints applied.

The details of the schedule, including activity maps are included in the report. These schedules and maps provide the guidance of the overall management strategy to the timber stand level for implementation. Each of the activities outlined corresponds to the summary report for each of the first five years. From this detailed level of reporting, annual budgets are prepared to provide a monthly plan for the specific year.

A detailed description of the model is included on the following pages.

Modeling Process for Strategic Planning

WOODSTOCK MODELING PROCESS

American Forest Management (AFM) generates harvest schedules along with discounted cash flow-based timberland valuations using commercial harvest-scheduling software called *Woodstock*. *Woodstock* develops an optimal harvest schedule and maximizes Net Present Value (NPV) by optimizing combinations of stand and property level possibilities within the constraints imposed by various assumptions and property level attributes. Since appraisals of market value require that all assumptions be based on the marketplace, these assumptions, as well as the model itself, are tailored to fit the marketplace in which the subject property is located. Optimality across various sets of assumptions and constraints is tested iteratively through multiple model runs.

The guiding objective of *Woodstock* in developing a harvest schedule is to maximize the NPV – over the planning horizon – for a single ownership. In the absence of constraints, NPV is maximized by maximizing each individual stand within the ownership. The introduction of constraints into the model requires *Woodstock* to re-optimize subject to the constraints, which by necessity reduces the NPV of the subject property. This means that some stands may be held longer than their optimal rotation, while others may be harvested earlier, thus reducing returns. When utilized for appraisal purposes, the appraisers provide constraints based on their knowledge of the timberland marketplace.

DATA SOURCE

The data used by *Woodstock* for individual stands of timber are obtained directly from an inventory database for the subject property. The inventory database can be from a new inventory or it can be a grown database maintained on the subject property. When a complete stand by stand database is not available for the property, the modeler may make assumptions to complete a hypothetical database. Whatever the source of the database, the accuracy of the model's projections is limited by the quality of the database utilized.

For the purpose of harvest scheduling, stands are defined by the following characteristics:

1. Year Established - combined with current year to determine age.
2. Major Species - for example, Loblolly, Pine-Hardwood, etc.
3. Site Type - for example, Branch Bottom, Coastal Flatwoods, etc.

4. Origin - natural or planted.
5. Convertibility - ability to regenerate to pine following site preparation and planting.
6. Operability - number of months stand is available for logging, expressed in 3 month intervals.
7. Site Index - Total height in feet at age 25 for plantations and age 50 for natural stands.
8. Total pine stems/acre, basal area/acre.
9. Total hardwood stems/acre, basal area/acre.
10. Green weight in tons of pine pulpwood, chip-n-saw, and sawtimber, hardwood pulpwood and sawtimber.
11. Number of previous thinnings.
12. Type of previous fertilizations.
13. Land Class Designation - designation for long-term timber production that may or may not be clearcut, SMZ's and non-productive/non-forested land.
14. Physiographic Region - piedmont, coastal plain, etc.

Stands with identical values for the preceding characteristics will "grow" in an identical manner within the harvest scheduling system

ASSUMPTIONS

There are many biologic and economic parameters that may affect a stand's NPV and optimal harvest schedule. Many of these parameters are determined by external forces—such as stumpage prices— or vary depending on property location or owner preferences. These parameters enter the model as assumptions that can be changed for each analysis to best describe current conditions. Through sensitivity analysis, the more critical assumptions can be tested to determine their impact on the harvest schedule. When *Woodstock* is utilized for appraisal purposes, the assumptions are based on the appraisers' interpretation of the marketplace rather than particular owner preferences.

A summary of the assumptions that may be varied in *Woodstock* is given below.

1. General

- a. Annualized discount rate (real, net of inflation) - minimum rate of return required, above the general rate of inflation.
- b. Annualized inflation rate - to reflect general price/cost inflation in economy; combined with discount rate and price/cost appreciation rates to calculate nominal values and returns.
- c. Planning period length (years) - the period of time over which a cutting schedule is to be projected. Although any period length can be selected, analysis periods equivalent to 20-30 years are commonly used. This time period provides an entire view of performance of a property for the typical investment horizon.
- d. Beginning year of planning period - the initial year of the planning period can be specified as any year greater than or equal to the last year in which the property was inventoried. *Woodstock* will initially grow the inventory forward to the start of the planning period, before beginning to calculate the NPV of future management.

2. Volume Units

The analysis is conducted and reported in tons. Preferred conversion ratios are required if volumes are provided and/or are to be reported in units other than tons.

3. Utilization Specifications

- a. Minimum DBH by product - used to calculate volumes by product category.
- b. Top DOB by product – used to calculate volumes by product category.

4. Incomes/Asset Values

- a. Stumpage prices and annual appreciation rates by product – current price per unit volume for standing timber (in same units selected for reporting), and annual real rate of increase expected in prices, by product, over the planning period.
- b. Hunting lease income and annual appreciation rate – price per acre for annual lease of hunting rights for the subject property, and annual real rate of increase expected in lease income over the planning period.

c. Bare land values and annual appreciation rates (convertible and non-convertible lands) – price per acre for sale of bare land, and annual real rate of increase expected in bare land values over the planning period. Separate prices may be entered for each land class. Normally, when utilized for appraisal purposes, the bare land values entered into *Woodstock* are approximations made by the appraiser since *Woodstock* is run as a portion of the appraisal process before the final allocated bare land values are determined.

d. Miscellaneous revenues – other miscellaneous revenues can also be incorporated on a per acre basis.

5. Costs

a. Regeneration costs and annual appreciation rates (plantations and natural regeneration) – price per acre for regenerating a stand following harvesting.

The model is designed to regenerate stands within two years following a harvest on stands planted to pine. Natural regeneration is assumed to occur in the year after harvest. The costs of regeneration are added to the cash flow stream for calculation of NPV over the planning period.

Woodstock assumes all stands that are currently in plantations, and all natural stands that occur on lands convertible to pine, will be planted to pine following harvesting. Stands on non-convertible lands are assumed to regenerate naturally.

Different costs may be entered for planting and natural regeneration. This cost includes all applicable aspects of regeneration such as site preparation, seedlings, and planting.

b. Ad valorem taxes and annual appreciation rate - cost per acre for annual property taxes on subject property, and annual real rate of increase expected in tax rates over the planning period.

c. Management costs and annual appreciation rate - annual cost per acre for professional management services (or average annual cost per acre of internal staff management) and annual real rate of increase expected in management costs over the planning period.

d. Timber sale costs - commission or internal staff cost of conducting timber sales, expressed as a percent of gross sale income.

e. Hunting lease costs and annual appreciation rate - commission or internal staff cost of administering hunting leases, expressed as a percent of gross lease income.

f. Miscellaneous costs and annual appreciation rate - annual operating cost per acre on subject property that has not been included in other cost categories, and annual real rate of increase expected in miscellaneous costs over the planning period.

6. Regeneration

Four assumptions must be made concerning stands that are currently premerchantable – for which no information exists on current volumes or stand density – or stands that will be harvested at some point during the planning period. These are:

- a. Age of merchantability (plantations and natural stands) - age at which a regenerated stand has generated measurable volume and could be considered commercially marketable. Different ages may be entered for planted and natural stands.
- b. Stems/acre at merchantability (plantations and natural stands) - the number of trees/acre expected to have survived when a stand achieves merchantability. Different values may be entered for planted and natural stands.
- c. Basal area/acre and merchantability (plantations and natural stands) - the basal area in square feet/acre of all trees expected to have survived when a stand achieves merchantability. Different values may be entered for planted and natural stands.
- d. Default site index (plantations and natural stands) - the site index to be used by the model if no index has been recorded for a stand. Different values may be entered for planted (base 25) and natural stands (base 50).

7. Silviculture Regimes

Woodstock supports thinning and fertilization for plantation loblolly pine and plantation slash pine as management alternatives in planning long-term cutting schedules. Currently, *Woodstock* has been designed to develop and analyze a number of regimes over the planning period, with combinations of fertilization and thinning. *Woodstock* calculates the NPV of each stand under each regime, determines its effect on the maximum NPV for the entire property, and then selects the regime on each stand that will maximize NPV for the entire property. When utilized for appraisals, only selected regimes appropriate for the property and marketplace are considered.

a. Thinning

If thinning is considered, the following assumptions are defined.

1. Thinning regimes - *Woodstock* has the flexibility to analyze a number of regimes over the planning period, with the maximum number of thinnings to be specified by the user. Thinning parameters, such as minimum stocking, residual stocking, and minimum number of years between harvests can all be adjusted by the user.

2. Thinning method -. First thins are modeled as row thins with fifth row down rows and selection between rows. All other thins are modeled as selection thins. All selection is from below.

3. Minimum volume for thinning - minimum cut volume can be specified, which will cause the model to reject a thinning alternative if it would not generate the minimum volume required.

4. Stumpage prices - current price per unit volume for standing timber removed through thinning (in same units selected for reporting). Stumpage prices for thinnings are assumed to appreciate at the same rate as stumpage prices for clearcut timber.

b. Fertilization

1. Fertilization regimes – the user specifies the number of fertilizations allowed and the fertilization age.

2. Fertilization cost - cost per acre for application and price for nitrogen fertilizer. The appreciation rate may be adjusted by the user but is generally assumed to be equal to the inflation rate.

HARVESTING CONSTRAINTS

Woodstock provides flexibility in applying harvesting constraints. Harvests may be constrained by acreage and volume for individual years as well as for the entire planning period. Harvest age, stocking, and volume restrictions may be constant over the schedule, or vary from year to year.

Here is a summary of how some of these constraints are defined and used by the model:

1. Absolute Constraints - the user can specify a minimum or maximum number of acres or amount of volume (for any and all products) that may be cut in any combination of one or more years. These may vary between years. *Woodstock* is also capable of constraining the variability in harvest acreage or volume

between years. Age ranges, stocking restrictions, and volume removal restrictions on harvests are also considered absolute constraints.

For example, the constraints

```
ccacres >= 500 1
ccacres <= 1000 1
```

indicate that at least 500, but not more than 1000, acres must be clearcut in year 1 of the harvest schedule. If, in the remaining years, a limit on the magnitude of variation between years were desired, that could be accomplished with the following constraints:

```
ccacres - ccacres[-1] <= 100 2.._LENGTH
ccacres - ccacres[-1] >= 0 2.._LENGTH
```

The effect of the combined constraints is that *Woodstock* must clearcut at least 500 acres each year, it may not reduce its acreage cut from one year to the next, and it may not increase its acreage cut more than 100 acres from one year to the next.

2. Flow Constraints - harvests may also be constrained by using “flow” constraints, which differ from absolute constraints in that they operate not through absolute values, but through percentages. For example, if swings of greater than 10% in annual cashflow were seen as undesirable, the following constraint could be imposed:

```
_SEQ(cashflow,0.1,0.1) 1.._LENGTH.
```

This would prevent cashflow from increasing or decreasing by more than 10% from one year to the next in every year of the harvest schedule, but would impose neither a floor nor a ceiling.

Woodstock is not limited to constraining harvests alone. Almost any output may be used to constrain the model if desired.

GROWTH MODELS

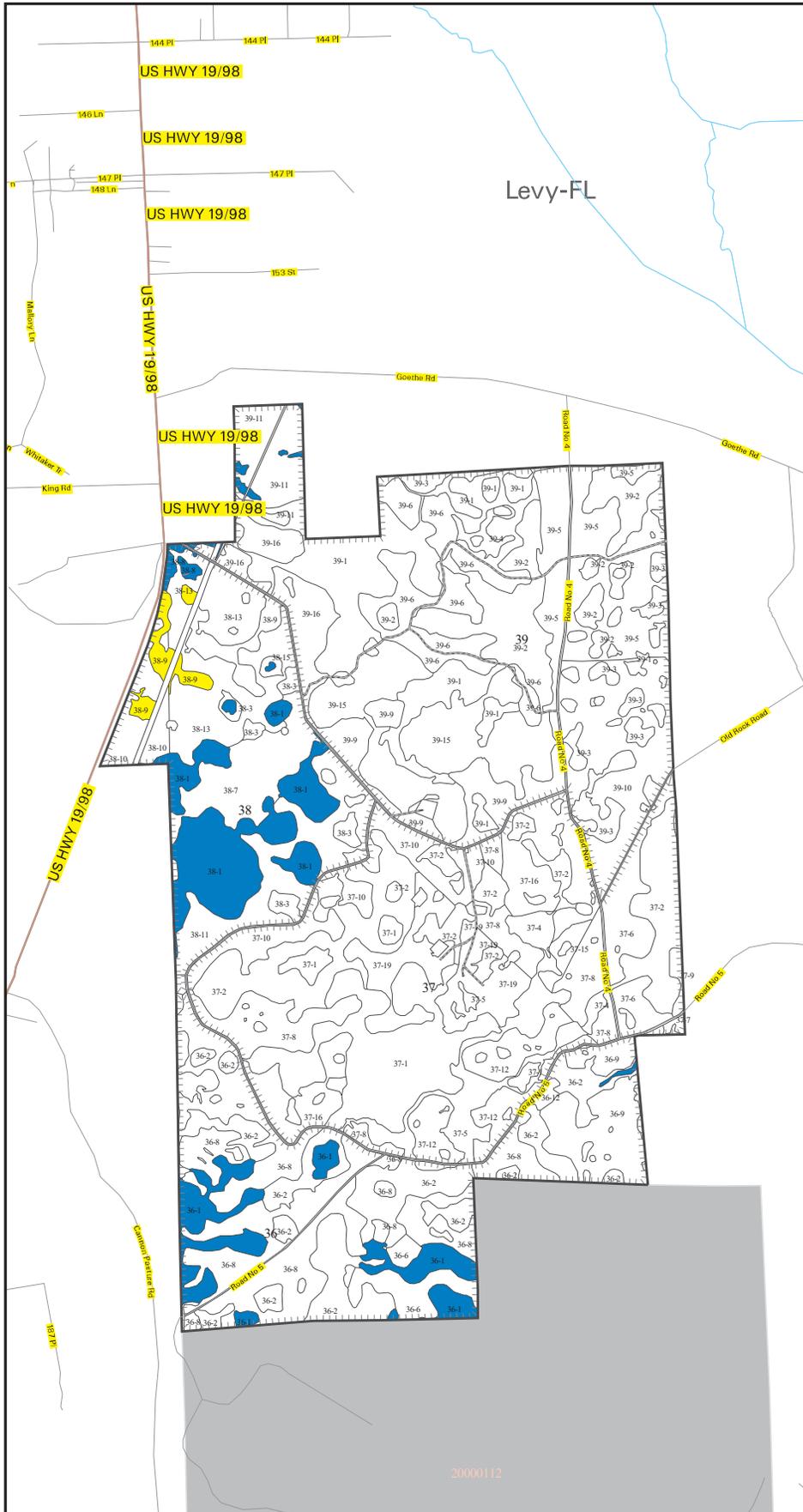
Woodstock includes models for projecting timber yields over the planning period for Slash pine, Loblolly pine, and natural stands in various physiographic regions. These models use a “whole-stand” approach to projecting growth: current age, average stems and basal area, site, and current volumes are used to project yields in future periods.

Allocation of future volumes by product (e.g., pulp, sawtimber) is estimated using yield breakdown equations, or by Weibull distribution models. The breakdown equations utilize the product classes defined by threshold, and top diameters.

In stands that are currently merchantable, volumes are calculated for the current year to determine the difference between actual volumes and model volumes.

Yields are projected for merchantable stands for each year in the planning period. Adjustments are made to these projected volumes using the difference calculated in the preceding step.

For stands that are currently premerchantable, and to model growth of regeneration in stands that are cut during the planning period, model volumes are projected from the age of merchantability to the end of the planning period.



COM-STD	SPECIES	ORIGIN	ACTIVITY	YEAR	ACRES
36-1	PH	N	CC(1,1)	1972	82.98
36-2	CY	N		1970	186.22
36-3	UD	O		0	3.0
36-6	SL	P		2000	32.20
36-8	SL	P		1999	236.75
36-9	SL	P		2002	70.58
36-12	CO	O		2006	3.100
36-92	UD	O		0	8.3
36-99	PH	N		1978	0.78
COMP TOTAL = 624.54					
37-1	CY	N		1972	155.30
37-2	CY	N		2008	215.77
37-3	UD	O		0	3.33
37-4	CY	N		1972	18.46
37-5	CY	N		2004	62.72
37-6	SL	P		2002	52.91
37-7	SL	P		1998	2.18
37-8	CO	O		0	97.54
37-9	SL	P		1997	5.37
37-10	SL	P		2001	67.47
37-12	SL	P		2001	64.33
37-15	SL	P		2001	9.28
37-16	SL	P		2001	94.26
37-19	SL	P		2005	81.85
37-83	UD	O		0	5.53
37-92	UD	O		0	17.10
37-99	PH	N		1978	0.11
COMP TOTAL = 951.51					
38-1	PH	N	CC(1,1)	1980	121.30
38-3	CY	N		1972	24.14
38-7	CO	O		2006	64.20
38-8	HH	N		1900	5.37
38-9	CY	N	CC(1,1)	1972	21.25
38-6	CY	N	CC(5,1)	1972	19.53
38-10	SL	P		2006	31.55
38-11	SL	P		2002	80.12
38-13	SL	P		2001	108.86
38-14	CO	O		2007	1.47
38-15	CY	N		1997	5.26
38-92	UD	O		0	5.62
38-93	UD	O		0	9.31
COMP TOTAL = 496.56					
39-1	PH	N		1970	168.7
39-2	CY	N		2005	125.0
39-3	CY	N		1970	55.28
39-4	PH	N		1970	8.7
39-5	SL	P		1998	135.37
39-6	SL	P		1998	124.18
39-7	UD	O		0	3.95
39-8	HH	N	CC(1,1)	1900	4.45
39-9	SL	P		1997	66.1
39-10	SL	P		1997	110.49
39-11	SL	P		1997	51.16
39-13	SL	P		2001	1.49
39-15	CY	N		2005	156.2
39-16	SL	P		1997	54.31
39-83	UD	O		0	2.24
39-92	UD	O		0	19.81
39-93	UD	O		0	2.60
COMP TOTAL = 1088.50					
TOTAL = 3161.11					

LEGEND

- Interstate/US Highway
- State Highway
- County/City Road
- Company Grade Road
- Woods Trail
- Perennial Stream
- Intermittent Stream
- Railroad
- Utility R/W
- County Boundary
- State Boundary
- Water

2009 CLEARCUT
 2013 CLEARCUT

HARVEST SCHEDULE MAP

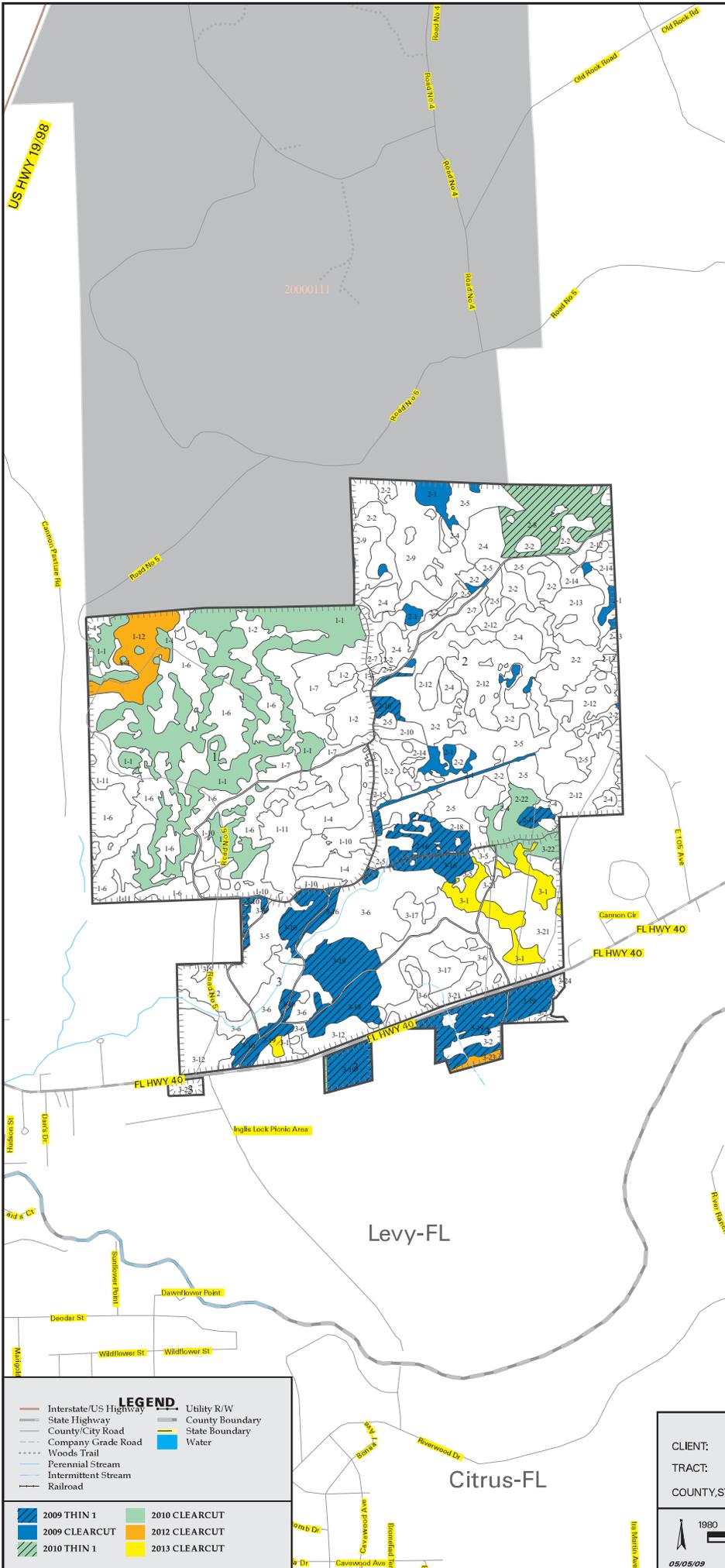
CLIENT: **PGN**

TRACT: **LEVY PROJECT NORTH-20000111**

COUNTY, STATE: **LEVY, FL**

1980 0 1980 Feet

05/05/09 *This map is intended for planning purposes only*



COM-STD	SPECIES	ORIGIN	ACTIVITY	YEAR	ACRES
1-1	CY	N		1900	223.18
1-2	CY	N	CC(2,1)	2006	65.41
1-3	UD	N		0	2.42
1-4	CO	O		2006	56.35
1-6	SL	P		2004	214.17
1-7	SL	P		2001	44.76
1-10	SL	P		1997	70.55
1-11	CY	P		2006	69.59
1-12	SL	P	CC(4,1)	1979	35.40
1-92	UD	O		0	5.65
COMP TOTAL = 787.47					
2-1	PI	N		1972	34.85
2-2	PI	N	CC(1,1)	2007	218.56
2-3	UD	N		0	6.57
2-4	CY	N		1972	63.62
2-5	CY	N		2007	157.7
2-7	SL	P		2000	28.88
2-8	SL	P	Thin(2,1)	1996	51.49
2-9	SL	P		2000	73.17
2-10	SL	P		1996	7.18
2-11	SL	P		1998	1.52
2-12	SL	P		2003	121.39
2-13	SL	P		2000	28.63
2-14	SL	P		1998	25.94
2-15	SL	P		2000	4.97
2-16	SL	P	Thin(1,1)	1985	32.11
2-18	SL	P		2002	2.89
2-22	LL	N	CC(2,1)	1923	18.82
2-92	UD	O		0	3.72
COMP TOTAL = 883.36					
3-1	CY	N		1972	36.81
3-2	PH	N	CC(5,1)	1970	15.2
3-3	UD	N		0	5.88
3-5	CO	O		2006	43.85
3-6	CO	O		2007	122.17
3-10	SL	P	Thin(1,1)	1985	25.73
3-12	SL	P		2003	76.19
3-16	SL	P	Thin(1,1)	1995	17.88
3-17	SL	P		1998	62.53
3-19	SL	P	Thin(1,1)	1995	119.70
3-21	SL	N		2000	74.87
3-22	LL	N	CC(2,1)	1923	11.85
3-23	SL	N	CC(4,1)	1950	3.66
3-24	PH	N		1972	3.55
3-25	SL	P		1996	5.45
3-92	UD	O		0	12.37
COMP TOTAL = 637.61					
TOTAL = 2308.44					

LEGEND

- Interstate/US Highway
- State Highway
- County/City Road
- Company Grade Road
- Woods Trail
- Perennial Stream
- Intermittent Stream
- Railroad
- Utility R/W
- County Boundary
- State Boundary
- Water

2009 THIN 1
 2010 CLEARCUT

2009 CLEARCUT
 2012 CLEARCUT

2010 THIN 1
 2013 CLEARCUT

HARVEST SCHEDULE MAP

CLIENT: PGN

TRACT: LEVY PROJECT SOUTH-20000112

COUNTY, STATE: LEVY, FL

1990 0 1980 Feet

05/05/09 *This map is intended for planning purposes only*