ELEMENT 5A	GOALS AND OBJECTIVES
PROJECT NAME	Compartments E, G, H, I
UNIT NAME(s)	See Appendix O for current TTA's

INSTALLATION PURPOSE AND MANAGEMENT GOALS

Eglin AFB's prescribed fire program provides direct and long-term support to the military tests and training missions through the prioritized, landscape-level application of fire at a frequency necessary to maintain the health of the longleaf pine ecosystem while providing for firefighter and public safety. Longleaf sandhill and flatwoods ecological condition on Eglin has been shown to decline with a fire return interval greater than 5 years. According to objectives established in Eglin's Integrated Natural Resource Management Plan (INRMP) and the Wildland Fire Management Plan, the wildland fire element is charged with prescribed burning an average of 90,000 acres per year over a 5-year average. With more than 270,000 fire-dependent acres in Eglin's Core Conservation Area, 90,000 acres per year guarantees an average fire return interval of 3 years. To maintain this landscape-level effort, the primary focus is on long-term fire regime instead of the effects of a single burn unless specific management objectives are identified for a unit.

RESOURCE OBJECTIVES

1) **Fuels Management**
   - **A. Decrease Wildfire Potential and Severity**
     - I. Reduce fuels with 1 and 10 hour timelag classes
     - II. Prevent and gradually reduce duff accumulation
     - III. Reduce average fuelbed depth and shrub height through woody top-kill
   - **B. Improve Military Mission Flexibility**
     - I. Reduce fuels within 1 and 10 hour timelag classes
     - II. Maintain reduced fuel loadings in areas surrounding frequent military missions (A-78 and A-79)
     - III. Zero mission impacts from prescribed burns (fire and/or smoke-related)

2) **Habitat Improvement**
   - **A. Maintain and Restore Longleaf Pine Flatwoods Ecosystem**
     - I. Improve abundance and diversity of plant community with an emphasis on promoting rare fire-dependent species
     - II. Prepare seedbed for Longleaf Pine regeneration through removal of needle litter and duff
     - III. Minimize longleaf pine mortality in all size classes
     - IV. Reduce evergreen hardwood midstory
     - V. Minimize ground disturbance in flatwoods during prescribed fire operations
   - **B. Improve Breeding and Foraging Habitat of Endangered Species**
     - **I. Red-cockaded Woodpecker (RCW)**
       - a) Avoid ground disturbance within 200' of active RCW clusters
       - b) Improve abundance and diversity of groundcover in proximity of RCW clusters
       - c) Reduce hardwood midstory and sand pine in proximity of RCW clusters
     - **II. Reticulated Salamander**
       - a) Avoid ground disturbance within 1500' of salamander ponds
       - b) Improve abundance and diversity of groundcover within and adjacent to salamander ponds
       - c) Reduce midstory and duff within salamander ponds

ELEMENT 5B	FIRE TREATMENT OBJECTIVES
PROJECT NAME	Compartments E, G, H, I
UNIT NAME(s)	See Appendix O for current TTA's

Prescribed Fire Objectives

1. Reduce total hazardous fuel loadings throughout the treatment areas to protect life, property and the natural resource.
2. Reduce litter and duff accumulations within treatment units
3. Reduce evergreen shrub, sand pine, and average fuel bed depths within treatment units
4. Provide a low to moderate severity burn across treatment units

Acceptable Range of Results

ITEM	RANGE
Area Burned	50 – 100%
Evergreen shrub topkill	> 25%
Sand pine complete kill	> 25%
Litter depth reduction	> 10%
Duff depth reduction	0-20%
1 HR fuel consumption	> 50%
10 HR fuel consumption	> 10%
Increase in herbaceous ground cover	> 10%
Burn severity	Low to Moderate
Longleaf mortality	10%

Area Burned

- Calculations for area burned should exclude semi-permanent and permanent wetlands, as these areas don't typically burn under normal moisture conditions.
- Less than 50% surface consumption is acceptable when burning in 1-year roughs and for first entry fuel reduction burns.

Duff Reduction

- Research has shown that >40% reduction in duff by volume at the base of longleaf trees (duff donut) from a single burn significantly increases mortality, so gradual duff reduction is the goal.

Increase in herbaceous groundcover

- Greater than 10% increase in herbaceous groundcover may not be possible from a single burn in healthy, fire-maintained flatwoods. In these areas, maintenance of groundcover abundance and diversity is the goal.

Burn severity

- The Eglin INRMP objective is <1% high severity (based on satellite imagery) from prescribed fires, but high severity fire in depression wetlands that have become encroached with woody species may be desirable. High severity fire in these wetlands is acceptable and should be excluded from the unit level calculation.

Longleaf mortality

- Longleaf mortality should be minimized to the extent possible at all times; however, some longleaf mortality is unavoidable and may be desirable in areas of thick regeneration as a stand develops.

CONSTRAINTS

Limited wind speed and direction

Qualified resources availability

Duff moisture

Potential Smoke impacts