

DRAFT

Fire Regime Condition Class (FRCC) Interagency Handbook Reference Conditions

Modeler: Caroline Noble

Date: 5/10/04 DRAFT **PNVG Code:** EGSG

Potential Natural Vegetation Group: Everglades Sawgrass

Geographic Area: Southern Florida

Description: Medium tall to tall (3m) grassland with scattered bayheads of low to medium tall broadleaf evergreen trees and shrubs. Shallow to deep peat, organic soil. Occurs on flat sites ranging from 0-2 feet in elevation and having an average hydroperiod of 10 months. Vegetation dominated by Sawgrass but largely dependent upon hydroperiod, fire frequency, and soil depth. May range from nearly monotypic stands of dominants to a combination of 25-30 species including: Gulf muhly, plume grass, spikerush, cattail, maiden cane, and beaksedge. Prairie may be invaded by native trees and shrubs including willow, wax myrtle, and button bush. Common invasive species include *Melaleuca* and *Casuarina*.

Fire Regime Description: Fire Regime Group 2, stand replacement. 1-10 year MFI, with frequent, moderate to high intensity fires occurring at any time of year. Most acreage burns from April – June during drier, early lightning season. Less common (1-2/decade) severe fires associated with drought occurring primarily in March-May. Anthropogenic fire considered. Natural fire regime currently altered by urbanization and artificially controlled water levels.

Vegetation Type and Structure

| Class* | Percent of Landscape | Description |
|------------------------------|-------------------------|--|
| A: post replacement | 94 | Up to 10 years post replacement, maintained as A by moderate intensity, typically growing season fire. Species composition and structure include primarily Sawgrass of varying height and density. Can go to C with severe fire followed by high water levels. |
| B: mid-seral closed | 3 | Shrub wetland, >10 years post replacement. Encroaching shrubs include willow, wax myrtle, and button bush. Can revert to A by <u>repeated</u> growing season moderate to high intensity fire at 1-5 year interval. Can go to C with severe fire followed by high water levels. |
| C: late- seral open | 2 | Open water resulting from submerged stems caused by high water levels, especially following severe drought fires consuming organic soils. Can return to A through drought condition fires followed by low water levels if there is water flow. If no water flow then typically remains in C. |
| D: late- seral closed | 1 | Hydric Hammock, Mixed Cypress-Hardwood Swamp (no water flow), or Mangrove swamp (tidal flow). Maintained in D by no fire. Severe fire could go to B or D depending |

upon water level.

Total 100

*Formal codes for classes A-E are: AESP, BMSC, CMSO, DLSO, and ELSC, respectively.

Fire Frequency and Severity

| Fire Severity | Fire Frequency (yrs) | Probability | Percent, All Fires | Description |
|----------------------|----------------------|-------------|--------------------|---|
| Replacement Fire | 3 | .333 | 93 | Occurs in A and B. |
| Non-Replacement Fire | 40 | .025 | 7 | Maintains B and D with surface fire, may move D to B with mosaic fire |
| All Fire Frequency* | 3 | .358 | 100 | |

*All Fire Probability = sum of replacement fire and non-replacement fire probabilities. All Fire Frequency = inverse of all fire probability (previous calculation).

References

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VDDT File Documentation

Include screen captures (print-screens) from any of the VDDT graphs that were used to develop reference conditions.

Assumptions:





