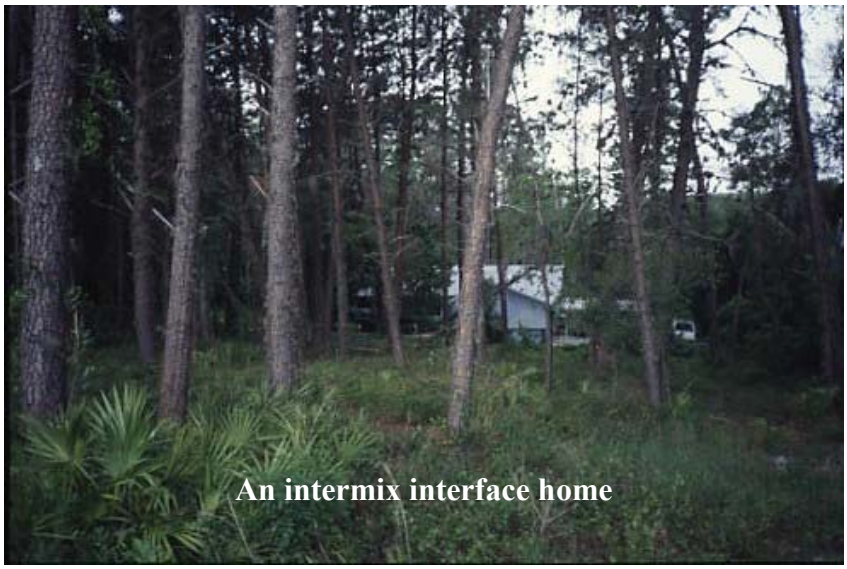
WILDFIRE HAZARD & RISK ASSESSMENT

The process for assessing your subdivision or neighborhood can be divided into five distinct steps. Each is necessary to efficiently and accurately perform the assessment. The steps should be completed in order; however, Step 5 can be completed separately from the rest of the assessment. In completing your assessment, you will need to use the FLORIDA WILDFIRE HAZARD & RISK ASSESSMENT SCORESHEET found on this CD-ROM.

Step 1 – Identify Areas to be Evaluated

There are two types of subdivisions that are at risk from a wildfire – boundary interface subdivisions and intermix interface subdivisions. Fully developed subdivisions whose lots form a distinct boundary with wildlands are called *boundary interfaces*. Subdivisions where undeveloped lots (wildlands) are interspersed with developed lots are referred to as *intermix interfaces*.


An intermix interface home

If the number of undeveloped lots within an intermix interface subdivision are few, the danger of a wildfire burning into the subdivision is greatly reduced. This usually occurs once the subdivision is more that 75% built out (three out of four lots are developed). Subdivisions where this occurs need not be assessed unless they also have a boundary interface component **or** the vegetation found on the undeveloped lots is rated extreme hazard. Wildlands less than 5 acres in size and completely surrounded by development are referred to as "occluded interface" areas and need not be assessed unless it is felt that the undeveloped parcels pose a high risk to neighboring structures because of high fuel loads or high flammability characteristics of the structures.

Once the wildland/urban interface area to be assessed has been determined, give it a name (like "Bay Woods Unit South") and delineate the area on a map. If the subdivision is very large, divide it into neighborhoods, especially if the characteristics of the subdivision are not uniform throughout (for example: an area of the subdivision with 5- to 7-acre lots may be assessed as a unit).

Step 2 – Identify the Risk

Determine if the immediate area (within five miles) has had a higher than average occurrence of wildfires. This can mean either a history of wildfires burning into the subdivision or a higher than average number of wildfires starting in the area. Your local Division of Forestry office can help you determine how this compares with the average for the county. If the immediate area does indeed have a higher than average occurrence of wildfires, you will need to assign risk points on the scoresheet in Section F of the Wildfire Hazard and Risk Assessment Scoresheet found on the CD-ROM.

Step 3 – Identify the Fuel Hazard Type

Use the pictorial guide found in Section 2C (Scoresheet/Fuel Types) of the Site Map to determine the vegetation types (fuel) within intermix areas and along the interface boundary. If there is a mixture of vegetation types in the area, you should select the vegetation type most likely to do structural damage. This will probably be the vegetation type that is closest to the structures. Be sure to look beyond the edge of the vegetation boundary. Plants tend to be bigger along the edge of open areas in response to increased sunlight. You will get a better picture of the average vegetation heights by looking past the edge into the interior of the undeveloped area.

Once the vegetation type has been determined, assign the adjective (low, medium, high or extreme) that accurately describes the fuel. Convert your selected vegetation type to points in Section B of the Wildfire Hazard and Risk Assessment scoresheet.

Step 4 – Complete the Wildfire Hazard & Risk Assessment Scoresheet

(Included on this CD-ROM)

Evaluate the Access (Section A), Fire Protection (Section D) and Utilities (Section E) by looking at the characteristics of the subdivision as a whole.

In order to score Defensible Space (Section B.2) and Building Construction (Section C), assess **all** structures along the interface boundary and 25 percent of the additional structures within 300 feet of this boundary. If assessing an **intermix** interface, inspect a 25-50 percent sample of all structures that border wildland vegetation. Average the individual scores to determine an overall rating.

Step 5 – Identify Critical Facilities to be Protected

Critical facilities are those facilities that will need special protection from wildfire. This may be because the facilities are necessary to maintain infrastructure function, are smoke sensitive or would be very hazardous if ignited by an encroaching wildfire. A power substation, for example, may need additional brush clearance to provide adequate defensible space. In the case of a nursing home, a wildfire evacuation plan may also be necessary in order to quickly and efficiently transport patients out of smoky conditions. *This process can be completed at any stage of the assessment.*

Seek the help of local fire service professionals and community leaders in identifying critical facilities and developing a plan to eliminate hazards that threaten these facilities.

The below-listed facilities will need special consideration for protection from wildfire in order to maintain infrastructure function:

- ✓ power plants/substations
- ✓ power transmission lines
- ✓ water plants/well fields
- ✓ water treatment plants/lift stations
- ✓ fire and law enforcement stations
- ✓ communication towers

The below-listed facilities will need special protection due to their flammability:

- ✓ flammable liquid storage tanks
- ✓ landfills/dumps/junk yards
- ✓ sawmills and lumberyards
- ✓ hazardous materials storage areas

The below-listed facilities are smoke-sensitive:

- ✓ schools/day care centers
- ✓ nursing homes/assisted living facilities
- ✓ medical facilities
- ✓ airports
- ✓ correctional facilities
- ✓ roadways

Hazard & Wildfire Risk Assessment Scoresheet

A. ACCESS

1. Ingress and Egress

Two or more roads in/out	0
One road in/out *(entrance and exit is the same)*	7

2. Road Width

Road width is ≥ 24 feet	0
Road width is ≥ 20 feet and < 24 feet	2
Road width is < 20 feet	4

3. Road Accessibility

Hard surface all-weather road with driveable shoulders	0
Hard surface road without driveable shoulders	2
Graded dirt road	3
Non-maintained dirt road	5

4. Secondary Road Terminus

Majority of dead end roads ≤ 300 feet long	0
Majority of dead end roads > 300 feet long	3

5. Cul-de-sac Turnarounds

Outside radius ≥ 50 feet	0
Outside radius < 50 feet	3

6. Street Signs

Present with non-combustible materials	0
Present with combustible materials	3
Not present	5

B. VEGETATION

1. Vegetation Types

Low fire hazards	5
— *grasses to 3 feet tall (except cogon grass)* — *blowy leaves* — *hardwood swamps* — *palmetto/gallberry less than 3 feet*	

Medium fire hazards	10
— *cypress swamp* — *palmetto/gallberry 3-6 feet* — *grasses over 6 feet tall/cogon grass* — *sand pine scrub less than 6 feet tall* — *dense pine 20-60 feet tall*	
High fire hazards	20
— *palmetto/gallberry 3 to 6 feet with dense pine overstory** — *palmetto/gallberry greater than 6 feet* — *sand pine scrub over 6 feet*	
Extreme fire hazards	25
— *palmetto/gallbery over 6 feet with dense pine overstory** — *sand pine scrub with dense pine overstory** — *dense melaleuca*	

* Pine canopy must have at least 75% crown closure to be considered dense pine

2. Defensible Space (average for subdivision structures adjacent to wildland fuels)

More than 100 feet	0
Between 30 and 100 feet	10
Less than 30 feet	25

C. BUILDING CONSTRUCTION

1. Roof Material

> 75% of homes have Class A asphalt or fiberglass shingles, slate, or clay tiles, cement, concrete or metal roofing or terra-cotta tiles	0
50-75% of homes have Class A asphalt or fiberglass shingles, slate, or clay tiles, cement, concrete or metal roofing or terra-cotta tiles	10
< 50% of homes have Class A asphalt or fiberglass shingles, slate, or clay tiles, cement, concrete or metal roofing or terra-cotta tiles	15

2. Soffits/Siding

> 75% of homes have non-combustible or fire-resistant siding and soffits	0
50-74% of homes have non-combustible or fire-resistant siding and soffits	5
< 50% of homes have non-combustible or fire-resistant siding and soffits	10

3. Skirting (skip if not applicable)

> 75% of homes have skirting underneath raised floors/decks	0
50-74% of homes have skirting underneath	5
< 50% of homes have skirting underneath	10

D. FIRE PROTECTION

1. Helicopter Dip Spots (min 4' water depth year round/45' radius obstruction clearance/75' approach clearance in at least one direction)

Under 2 minute turnaround (< 1 mile)	0
Within 4 minute turnaround (1-2 miles)	2
Within 6 minute turnaround (2-3 miles)	4
Beyond 6 minute turnaround (greater than 3 miles) or unavailable	7

2. Structural Fire Protection

5 miles or less from staffed fire department	0
More than 5 miles from staffed fire department	5

3. Water Supply

a. Pressurized hydrants

500 gallons per minute hydrants available < 1000 foot spacing (municipal)	0
< 500 gallons per minute hydrants available	5
No pressurized hydrants available	10

b. Other water sources

**NOTE: If a pressurized system is available, skip this section*

Dry hydrants available year round within subdivision	0
Other accessible draft sources (min. 3000 gal) exist within subdivision	1
Draft or pressure sources available within 5 miles via all weather roads	3
No draft or pressure sources available within 5 miles	10

E. UTILITIES

1. Gas (skip if not applicable)

Underground/clearly marked	0
Underground/not marked	3
Above ground with 15 feet of brush clearance and > 50 feet from structure	1
Above ground with no brush clearance *or* within 50 feet of structure	3

2. Electric

Underground/clearly marked	0
Underground/not marked	3
Overhead with 20 foot wide maintained right-of-way (ROW)	1
Overhead, but right-of-way is overgrown/not maintained	5

3. Septic Tank/Drain Field Systems (skip if not applicable)

Present and clearly marked	1
Present, not clearly marked	3

F. ADDITIONAL RATING FACTORS *

1. Large adjacent areas of wildlands with accumulated wildland fuels and no prescribed burning program for fuel management	0 - 10
2. Homeowner association lacks the organizational structure for a sustained fire prevention and mitigation effort.	0 - 5
3. Extensive canal or ditch system makes cross country access to fires difficult	0 - 10
4. Closeness of adjacent structures may contribute to fire spread from structure to structure	0 - 5
5. Less than 2/3 of the lots have been developed - undeveloped lots covered with wildland fuels, making stopping spread of the fire through the subdivision difficult	0 - 10
6. History of wildfire occurrence is higher than surrounding areas due to lightning, arson, debris burning, etc.	0 - 10
*** Score only if applicable**	

TOTAL ____

HAZARD ASSESSMENT	POINT RANGE
Low Hazard	less than 50
Moderate Hazard	50-74
High Hazard	75-99
Very High Hazard	100-120
Extreme Hazard	more than 120