

# The Palm Coast Community Steps to Improve Community Preparedness for Wildfire

## Community Preparedness Case Study Series

### Case Study #4

March 2003



## Palm Coast, Florida

Palm Coast, Florida, has experienced several devastating wildfires in its short history. Carved out of a pine plantation and designed as a model community in the early 1970s, 42,000 acres were platted and sold in 1/4-acre lots. Many of the early inhabitants were retirees from New York, New Jersey, and Michigan, anxious to enjoy their later years with sunshine, ocean breeze, and low-maintenance lots. Most of them had no idea they were moving into an area that was likely to experience wildfire.



An early court agreement prevented the Palm Coast developers from building in phases, so lots were sold with no restriction on when building would occur. Even today some homes are isolated on wooded streets, the only house on the block. These vacant lots, owned by absentee owners around the world, contain young pine trees, saw-palmettos, waxmyrtle, and vines. Where the vegetation has not been managed, it is a wildfire hazard to neighbors, despite its value as privacy screen and wildlife habitat.

### The Fires

In 1985, a combination of low humidity, drought conditions, and wind gusts up to 35 mph sent a firestorm into Palm Coast. On May 17, 130 homes were lost when two wildfires swept through the community. Nearly identical weather conditions occurred in the summer of 1998 when two different fires burned along the northern and southern boundaries of Palm Coast, destroying more than 70 homes. Over that July 4th weekend in 1998, the entire county and nearby communities (100,000 people) were evacuated. Fortunately, no lives were lost in either fire.

### The Response

The community responded to these tragedies in two different ways, providing a story rich in hypothetical hindsight.

In 1985, Palm Coast was a large town of approximately 17,000 people. With a predominance of retirees from out of state, an enormous number of clubs blossomed, helping people find interesting ways to pass the time and meet their neighbors. The 1985 fire destroyed so many homes and came so close to the center of town that many doubted that the town would survive. The community responded with an incredible outpouring of support and resources for the homeless. A stronger community grew from the crisis, determined to rebuild, restore, and grow.



City of Palm Coast Web Site



The Florida Division of Forestry (DOF) analyzed why some homes burned in 1985 when others nearby did not and identified three important variables: the behavior of the fire, the proximity of undergrowth, and the use of combustible soffits. In response to these findings, a draft ordinance to reduce vegetation on undeveloped private lots was introduced in Flagler County, but there was little support for curtailing the rights of citizens.

By 1998, Flagler County's population had grown to 43,000, with the population of unincorporated Palm Coast nearing 30,000. Although portions of the city were completely developed, large subdivisions were still sparsely settled. Because of the availability of affordable housing, the community was attracting young families. In 1998, not everyone experienced the direct impacts of the fires as they had in 1985. But the fact that the community had experienced major losses from fires just 13 years apart fueled citizen anger and frustration. County commissioners lost elections, department heads were asked to leave, the vegetation ordinance was revised and passed, and a citizen task force began working on recommendations for improving the situation.

## Keys to Wildfire Preparedness in Palm Coast

Wildfire preparedness is occurring at the local and state levels. At the local level, the following steps have been key:



### **Use the county's power to pass ordinances and make them stick**

The county first passed a vegetation reduction ordinance in December 1998. When Palm Coast became an incorporated city in December 1999, the task of reducing vegetation fell to the new city departments. A slightly different ordinance was approved in 2001 that directs the city to identify hazard lot owners and to inform them by letter of their options for reducing fuels on their property. Owners have two options—they can reduce underbrush themselves, or they can ask the city to perform the service for them and pay the cost, which averages between \$200 and \$400. If the lot owner does neither, the city will clear the underbrush and charge the lot owner the cost plus a fine. If no payment is made, the city will place a lien on the property that must be paid before the lot can be sold or built upon.

### **Take every opportunity to educate and inform**

Providing information to residents about fire danger is a responsibility of many different agencies and is achieved through several different means. In Palm Coast, an Eagle Scout erected signs "Fire Danger Is..." at major intersections. A county Web site provides information about weather, current fires, and prevention tips. A red flag flies at DOF, county, and city offices on extreme fire hazard days. The county cooperative extension office provides information and programs about designing a landscape with plants that reduce the need for water and the risk of fire. A reverse 911 emergency calling system is in place that allows county officials to call residents in neighborhoods in imminent danger. School buses carry two-way radios. Weather alert radios are in all schools and government buildings. The county can break-in to local broadcast channels to alert citizens. A 24-hour public information hotline is updated daily.



### **Take an aggressive approach to firefighting and emergency response**

The county has increased the equipment available to fight fire and has changed the strategy used. No longer willing to wait until the fire burns to a road, county staff aggressively work to put the fire out even if it is in a wooded region. Dispatchers at the state, county, and city levels are able to dispatch each other's crews when they notify their own of an emergency. Increased communication within county departments has led to every staff member understanding their role in an emergency. Library volunteers may be asked to answer phones. School buses will be used for evacuation. Road building crews will follow the dozers to enable the tankers to have access to wildland fires. Regular conference calls keep all departments informed, and annual meetings with all relevant agencies and landowners provide information about new strategies, new equipment, and forecasts.

At the state level, these wildfire preparedness steps have accompanied local actions:

### **Play an active role in wildfire mitigation**

DOF has stationed a wildfire mitigation team in Palm Coast to service the nearby 17 counties. It works with landowners to burn fuel breaks and reduce hazardous vegetation around subdivisions. State legislation enables DOF to conduct fuel reduction initiatives on private property with notification. Where scattered housing prevents forested lots from being prescribed burned, mechanical removal options (thinning and mowing) are often used.



### **Play a role in educating citizens**

The DOF is also working to increase awareness and understanding about wildland fire and risk reduction practices. Staff speak at club meetings to raise awareness on a regular basis. A wildfire mitigation specialist is devoted to increasing public awareness and community response by mobilizing neighborhoods, conducting assessments, and rallying residents to take precautionary actions. A fire prevention strike team has been in the area to knock on doors and make residents more aware of the danger.

### **Define the state's role in training**

DOF provided all local responders with wildland fire suppression and incident command training to help them better respond to wildfire emergencies.

## **Next Steps**

Palm Coast is working in the subdivisions not yet touched by fire to reduce potential fuels and educate the residents. Using the FIREWISE Communities program, a variety of community leaders are working together and involving builders, realtors, and residents in reducing the risk of catastrophic wildfire.

## **Preparing for Wildfire: Lessons for Other Communities from Palm Coast**

1. Believe that wildfire can strike twice. Use any wildfire to help residents and officials believe “if it can happen once, it can happen again.”
2. Develop ordinances and policies using solid and reputable research. Don't let the perception of private property rights reduce the responsibility that all citizens share to protect their community.
3. Take advantage of funds available for digging wells, buying equipment, and improving emergency response.
4. Maintain excellent communication across city, county, and state departments.
5. Find a balance between engaging citizens and perspective home buyers with meaningful information and scaring them away from the region. Design an education program to provide serious information without the strong fear factor.
6. Start with a good land development code. Make sure new subdivisions are built in phases with several access routes, water hydrants, and appropriate road widths.
7. Develop a tree ordinance that makes sense for the region.
8. Be persistent. If changes and actions are not forthcoming from government agencies and offices, keep asking questions; be a pest if need be.

9. Use the energy from a disaster to recover and prevent another disaster from occurring. Don't waste time trying to place blame. Move on.
10. Maintain a zero tolerance for wildfires. Fight to put them out, not just contain them.

## Web Sites for More Information about Palm Coast and Wildfire Preparedness

City of Palm Coast: [www.ci.palm-coast.fl.us](http://www.ci.palm-coast.fl.us)

Flagler County Emergency Services: [www.flagleremergency.com](http://www.flagleremergency.com)

Division of Forestry: [www.fl-dof.com](http://www.fl-dof.com)

Cooperative Extension Service: [www.flaglercounty.org/extension/county2e.htm](http://www.flaglercounty.org/extension/county2e.htm)

Unless otherwise noted, photos are from Shruti Agrawal and Martha Monroe, University of Florida.

### The Wildfire Preparedness Project of the National Fire Plan

Communities across the U.S. have voiced increasing concern about how they can better prepare for wildfire. Even in areas of the country not traditionally thought of as having high fire risk, storms, changing climate, and pest/disease outbreaks have increased concern about the potential for catastrophic fire. In areas where fire is viewed as a natural part of the ecosystem, the fact that more and more people choose these places to live in means that there is a potential for major fire impacts. A team of scientists funded by the National Fire Plan have been visiting communities across the country to identify the activities communities are undertaking to increase wildfire preparedness, and the resources necessary to support these activities. The project is led by the North Central Research Station, in cooperation with the Pacific Northwest Research Station, University of Florida, University of Minnesota, and Southern Oregon University.

This is one in a series of summaries reflecting findings of the case studies. Hard copies of this summary can be obtained from the individuals listed below. All case study summaries currently available can be found on the web at:

[www.ncrs.fs.fed.us/4803/Highlights.htm](http://www.ncrs.fs.fed.us/4803/Highlights.htm)

#### For more information contact:

**Pam Jakes**  
North Central Research  
Station  
651 649-5163  
[pjakes@fs.fed.us](mailto:pjakes@fs.fed.us)



**Shruti Agrawal**  
and  
**Martha Monroe**  
University of Florida  
IFAS  
352 846-0878  
[mcmunroe@ufl.edu](mailto:mcmunroe@ufl.edu)

