



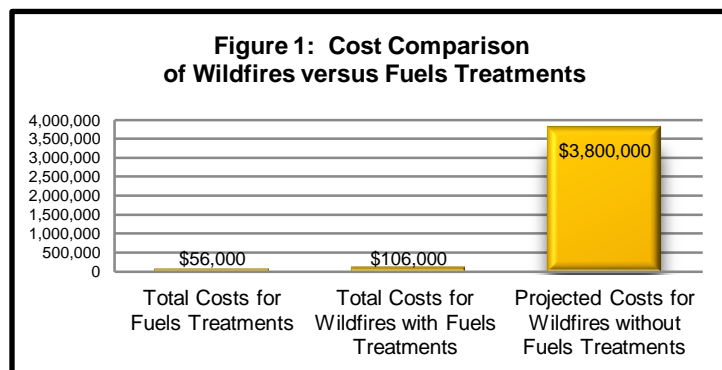
Merritt Island National Wildlife Refuge (Refuge) was established in 1963 as an overlay of the National Aeronautical Space Administration (NASA), John F. Kennedy Space Center (KSC), creating a unique partnership of technology and nature (Map 1). Consisting of 140,000 acres, the Refuge has a variety of habitats: coastal dunes, saltwater estuaries and marshes, freshwater impoundments, scrub, pine flatwoods, and hardwood hammocks. More than 1,500 species of plants and animals are found in these habitats, including 16 federally-listed threatened and endangered animal and plant species. The Refuge co-manages over 34,000 acres with National Park Service (NPS) as part of the Refuge and Canaveral National Seashore. Since the mid-1980s, the U.S. Fish and Wildlife Service staff has conducted fire operations on the Refuge including wildfire suppression, prescribed fire and wildland fire training. By agreement, protection of NASA resources, personnel and visitors from wildland fire is the responsibility of the U.S. Fish and Wildlife Service. The Refuge staff is also responsible for utilizing fire to maintain high quality wildlife habitat.

Introduction

In May 2012, lightning strikes ignited three wildfires in two recently treated fire management units on Merritt Island National Wildlife Refuge (Refuge). To measure the effectiveness of hazardous fuels management, the U.S. Fish and Wildlife Service analyzed wildfire impacts and suppression costs.

Fuels Treatments and Wildfires

From 2008 to 2012, a total of 57,158 acres were prescribed burned on the Refuge. These acres included two fire management units (FMU 2.3 – 3,990 acres in June 2010; FMU 7.2.A– 2,174 acres in January 2012) that experienced three wildfires in May 2012. The total area burned by the May 2012 wildfires in FMU2.3 and 7.2.A was 553 acres. FSPRO, a model which estimates the probability that a fire will burn an area, was used to show the difference in fire size probabilities in an area that had not been treated with prescribed fire versus the same area that had been treated with prescribed fire. One model run showed current fuel loads based on fuel treatments since 2008. The second model run showed probable fuel loads based on no fuel treatments since 2008. The resulting wildfire size projections were coupled to a Stratified Cost Index analysis. That analysis projected cost for the three wildfires without the 2010 and 2012 prescribed fires is \$3,800,000 (Figure 1). This cost estimate does not take into consideration potential damage to NASA or Refuge infrastructure, lost time due to employee evacuations, adverse impacts to critical space-related operations and impacts to NASA and Refuge visitor services. Also not included in this analysis are the impacts a wildfire would have on habitat and dependent species due to increased fire intensity and duration.

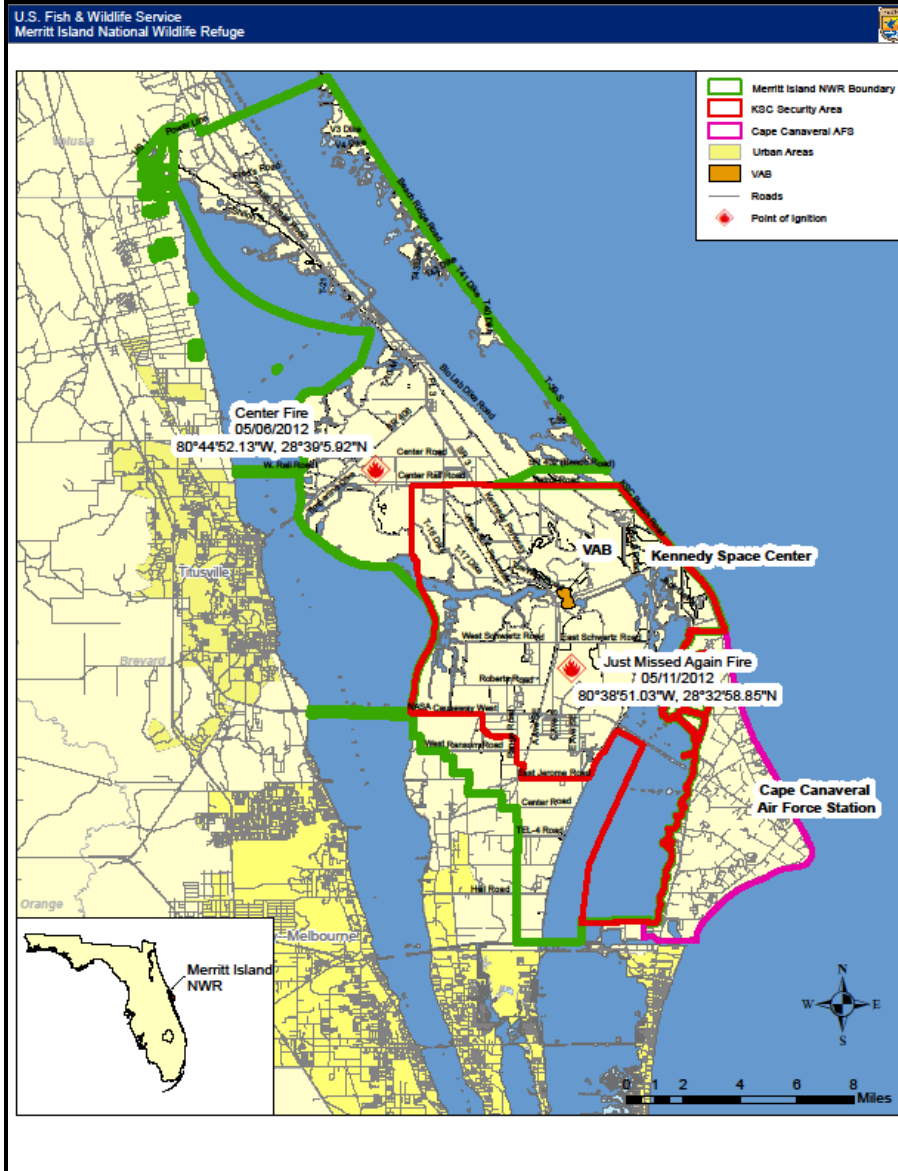


Summary

Prescribed fires conducted during the past five years reduced hazardous vegetation fuels, thereby protecting NASA and Refuge infrastructure, employees and visitors by mitigating and minimizing the intensity and duration of wildfires and significantly reducing impacts and costs of wildfires. The two prescribed burns cost \$56,000 (\$9.08/acre) to complete. The three wildfires cost \$106,000 (\$191.68/acre) to extinguish. Projected cost savings of wildfire suppression following the hazardous fuels treatments on these two units was \$3.6 million.



Merritt Island National Wildlife Refuge Fuels Treatment – A Southern Success Story



MAP 1: Merritt Island Refuge Locator and Vicinity Map

Special thanks to the Southeast Region of the U.S. Fish and Wildlife Service for allowing reprinting.

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Cohesive Strategy

Southern Update

The Southern Regional Strategy Committee completed the final draft of the Regional Risk Analysis Report October 15, 2012. The report is currently being considered at the national level for key components. Once concurred with, we will begin distribution to stakeholders across the South as well as construction of an action strategy. This should occur over the next month or so.

A Southeastern Regional Action Plan will follow the completion of the regional risk analysis focused on capturing actions the region has agreed to pursue during the next five years and make progress towards achieving the three national goals of the Cohesive Strategy. The action plan will develop a program of work and identify which stakeholders will be responsible for accomplishing specific plan elements along with a timeline for completion.

The Southeastern Risk Analysis, along with the other two regional risk analyses, will inform a national effort to assess and define national findings. The resulting national report will provide an executive summary of the regional risk analyses; document the risk analysis process including an explanation of risk characterization; conduct a national risk analyses; perform a national trade-off analysis including federal contributions; and identify next steps for the Cohesive Strategy effort.

More information available:

<http://sites.nemac.org/southeastcohesivefire>