## Kennedy Space Center (KSC) Proposed Gradient Site Southeast Domain (Domain 3)

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Web Page: http://www.nasa.gov/centers/kennedy/home/index.html

**Location:** The Kennedy Space Center (KSC) is located on the east coast of Central Florida approximately 40 miles from Orlando International Airport. KSC is situated in the southern third of Domain 3 at the southern-most extent of the southeastern frost line.

**History:** The terrestrial portion of KSC was purchased by the federal government in the late 1950s and early 1960s to establish a launch range for the nation's space program. It is co-managed in part by the U.S. Fish and



Wildlife Service (Merritt Island National Wildlife Reserve), the National Park Service (Canaveral National Seashore) and NASA (6,000 hectares comprising operational areas of the space program.

**Key Characteristics:** KSC is 57,000 hectares in size and is owned by NASA; all areas not utilized for direct space operations are maintained as wildlife refuge and National seashore. KSC currently has an active fire management program, in which prescribed fire is used to help maintain and restore ecological health of the site and to investigate questions related to fire ecology. The site is characterized by coastal dunes, coastal strand, pine flatwoods, high marsh, open water brackish lagoon systems, mesic hammocks, mangrove forests, and dry sandy scrub oak ridges (relict dunes). The landscape is that of a diverse coastal system with ancient dunes and interdunal swales (freshwater), wide open flatwoods, and marshes that fringe the estuarine systems of the Indian River Lagoon and Mosquito Lagoon. A large portion of the area is wetland with water control dikes that allow for hydrological management maintaining wetlands for migratory waterfowl, shorebirds, wading birds, and high marsh systems.

Facilities and Existing Infrastructure: A large portion of KSC is managed as security buffer for the space launch facilities and not accessible without permission. Since 1981, NASA has maintained a very active ecological program with long term ecological monitoring and ecological research. Extensive and long term ecological data sets on vegetation, wildlife populations, and landscape change have been established. Several hundred permanent vegetation plots are resampled regularly in all major ecosystem types, extensive population inventory data exists for marine, estuarine, wetland, and terrestrial vegetation and wildlife. A herbarium with over 2000 specimens is available for reference. The site has 52 existing meteorological towers with real time data streams, two eddy flux towers, an air quality monitoring station, and a NADP station (over 25 years). The data are archived in an extensive Oracle data base and numerous GIS data layers, making this one of the richest ecological data sets in the southeast.