

FIVE: ENVIRONMENT AND STORMWATER



Native Habitats and Environmentally Sensitive Lands Adjacent to Shakett Creek

Native Habitats and Environmentally Sensitive Lands

Figure 5-1 shows the location and type of native habitats remaining in the Nokomis Center. Some of these lands are preserved as part of private development or are located on County owned property. Others are being sought for preservation through the County's Environmentally Sensitive Lands Protection Program (ESLPP). One such site, known as the Curry Creek Preserve, has approximately 95 acres \pm with pristine native habitats and a natural meandering creek. A second environmentally sensitive lands site is being recommended for nomination to the ESLPP and is located on Pocono Trail. The Pocono Trail site has significant native habitats on four contiguous parcels (8.4 acres \pm) adjacent to Shakett Creek. (See Project Sheet ENV-1.)

The Sarasota County Comprehensive Plan, Apoxsee, "Principles for Evaluating Development Proposals in Native Habitats" are applied during every rezoning and preliminary or site and development plan review in Sarasota County. The Apoxsee Principles require new development to preserve environmentally sensitive lands, including wetlands, swamps, dry scrubs, scrubby flatwoods, and certain coastal habitats, including coastal hammocks, and to maintain both canopy and understory vegetation.

Coastal and Creek Habitats

Shoreline structures such as concrete seawalls, docks, and boat ramp accesses have been constructed along much of the coastal and creek habitats in the Nokomis Center. Many of these structures were constructed prior to the existing County regulations for construction of shoreline structures. The older structures do not meet the current environmental standards and need to be replaced, relocated or removed. Incentives, educational materials, and guidelines should be developed to encourage residents to make appropriate shoreline improvements on their property. (See Project Sheet ENV-2.)

Bay Water Quality

Bay water quality in the Sarasota County's estuaries, including Lyons, Dona and Roberts Bays, is a growing concern as development pressures increase. The 1994, Florida Department of Environmental Protection, Florida Water Quality Assessment Report for Southwest Florida provides summaries of stream, lake, and estuary water quality in Sarasota County. Lyons Bay, Dona Bay and Roberts Bay have a "fair" water quality

impairment rating. Shakett Creek/Cow Pen Slough discharges directly into Dona Bay and has a “fair to good” rating, as does Curry Creek which discharges into Roberts Bay.

Water quality improvements are critical to coastal habitats, including sea grasses and oyster beds. The public, especially boaters, needs to be aware of the importance and environmental sensitivity of coastal habitats such as mangroves and sea grasses. The restoration of mangroves is encouraged and, in some cases, required as part of minor work permits for dock construction and other development projects. Potential restoration sites include spoil islands created during the WCIND dredging of the Intracoastal Waterway such as Snake Island and other coastal areas with nuisance tree species. Replacing existing septic tank systems with central sewer service may also contribute to Bay water quality improvements.

Tree Protection

Trees provide an aesthetic and historic context and give environmental values such as slowing stormwater run-off and needed shade. Although much of the Nokomis Center is developed and trees were removed without the benefit of new trees being planted, many undeveloped properties contain large native trees, such as the majestic live oak. County tree protection ordinances require new development to plant new trees for removed trees, but there are no incentives to save large trees. Nor are there any requirements for planting new trees when exotic nuisance species are removed. All new development in the Nokomis Center will be required to plant new trees. Oak, Cedar, Elm and Hickory / Pecan trees, having a diameter at breast height (DBH) of 30 inches or greater, are considered “Landmark Trees” and will be required to be preserved. Developments that incorporate landmark trees into a site plan design will benefit from reduced tree protection permit requirements. If landmark trees can not be saved, additional trees of equal size/amount and type will be planted in their place.



Majestic Oak Trees in the Nokomis Center

Pollution Control

Several properties in the Nokomis Center are contaminated including petroleum contaminated sites. Three other areas have a potential abandoned landfill site. These areas are shown on Figure 5-1. Of the five petroleum contaminated sites, all but one participated in Florida Department of Environmental Protection (DEP) assistance programs. Four underground fuel tanks were removed from the fifth site in 1988. A contamination assessment of the tank area was conducted, but was inadequate to document to DEP that there was petroleum contamination above the State’s ground water cleanup target levels. If petroleum contamination is discovered on the site in the future, the site might qualify for the DEP “Brown Fields” program.

Stormwater Management and Flood Hazards

Figure 5-2 shows drainage basins and flood hazard areas within the Nokomis Center. Most of the area drains to Shakett Creek/Cow Pen Slough or to Curry Creek. The remaining coastal basin areas drain directly into Dona or Roberts Bay. The County is completing flood studies for both Curry Creek and Shakett Creek/Cow Pen Slough. Stormwater improvements will be identified as part of these flood studies to resolve structure flooding. Funding for these projects will be determined through the County’s Basin Planning Program which will be presented at public meetings in 2001 prior to adoption of the basin plans by the Sarasota County Board of County Commissioners. Structure flooding in the coastal basin areas and yard and road flooding will be evaluated on an individual basis. New development and rehabilitation in the flood hazard areas must meet requirements of the County’s Federal Emergency Management Agency (FEMA) Ordinance No. 98-014.

FIGURE 5-1
(see table of contents for link to document)

FIGURE 5-2
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