

PHYSICAL ENVIRONMENT FUNCTION

Natural Resources Department

Director's Background

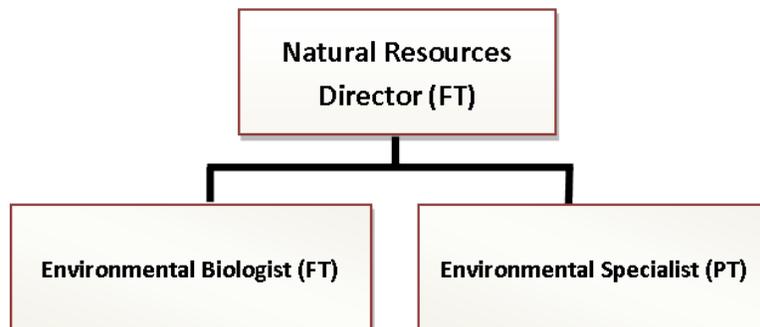
James T. Evans III, M.S.

Director Evans has been employed with the City of Sanibel for more than 14 years and has over 17 years of experience in south Florida ecosystems and expertise in water quality, marine biology, estuarine ecology, coastal systems, environmental restoration, land management and grant acquisition and management. He has held several positions with the City including, Conservation Officer, Environmental Planner, and Environmental Health and Water Quality Specialist, before becoming Director of Natural Resources in 2012. He has a Bachelor of Arts in Environmental Studies and a Master of Science in Environmental Science from Florida Gulf Coast University.

In August 2013, the Sanibel City Council voted to temporarily assign Director Evans to work full-time on water quality issues related to Lake Okeechobee and the Caloosahatchee River. Environmental Biologist, Holly Milbrandt, was established as Acting Natural Resources Director for the duration of Director Evan's special assignment.

NATURAL RESOURCES DEPARTMENT

Organizational Chart



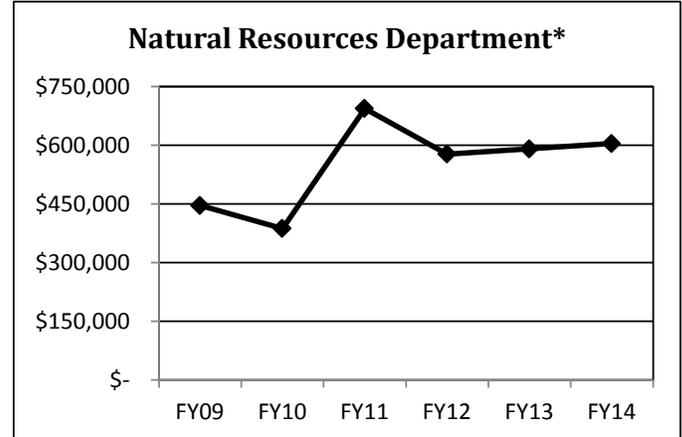
FT = Full - Time PT = Part -Time

Natural Resources Department

General Fund

DEPARTMENT FUNCTION

To coordinate, manage and implement special conservation and environmental projects and tasks as directed by City Council; to ensure that the City's native vegetation and wildlife habitat protection standards are adhered to; and to oversee exotic plant control, habitat restoration and land management programs for the City. To monitor the island's water quality and actively participate in improving water quality of the surrounding waters by addressing nutrient run-off, algae blooms, Caloosahatchee flows and Lake Okeechobee releases.



*The Brazilian Pepper Eradication Program was moved to this department in FY12

ACCOMPLISHMENTS

- Worked with the Mayor and City Council to raise awareness of regional water quality issues by local, state and federal leaders and pursued effective short and long-term solutions; drafted several letters on behalf of City Council and various water resource-related working groups; traveled with Mayor to Tallahassee and Washington D.C. to advocate for water resource-related legislation and restoration projects
- Received more than 146 grants totaling over \$13.32 million to fund needed environmental restoration and hurricane recovery projects since 1992, securing more than \$309,150 in grants between 2013 and 2014
- Completed phases I and II of the City's Comprehensive Nutrient Management Plan
- Completed restoration of the former Sanibel Bayous utility site using City and federal grant funds
- Completed Golf Course Fertilizer and Lake Management Annual Report Cards, with two of three golf courses in "Full Compliance" with the City's BMP recommendations
- Assisted Councilman Denham and City Council with creation of a regional fertilizer education partnership and campaign
- Completed code enforcement in Zone 6 of the Brazilian Pepper Eradication Program; initiated reinspections of areas previously in compliance
- Completed the construction of the Pond Apple Park/Shipleigh Trail boardwalk and the boardwalk along Pond Apple Park Trail to improve ADA accessibility,
- Assisted with the City's environmental education efforts related to the continued spiraling whitefly outbreak, alligator safety, and other topics, including YouTube videos on the City's Dark Skies Ordinance and permitting processes
- Participated in weekly calls and put together a weekly Caloosahatchee Conditions Report with our regional partnership including SCCF, Lee County and USFWS to help guide US Army Corps and SFWMD water management decisions
- Conducted regular red tide inspections during the November 2013 bloom and reported conditions to City Manager and provided public information on the beach conditions
- Conducted preliminary survey to assess compliance with the City's Dark Skies Ordinance; met with numerous property owners to assess compliance and assist with implementation of compliant lighting plans
- Completed Rosary Pea and Air Potato Removal Project on island conservation lands
- Completed construction of the Pond Apple/Shipleigh Trail Boardwalk and Pond Apple Park ADA Boardwalk projects

EMERGING ISSUES AND CHALLENGES FACING THE DEPARTMENT

- Continued impacts from the Caloosahatchee watershed and Lake Okeechobee regulatory discharges on coastal water quality resulting in increased frequency and duration of algal blooms that threaten Sanibel's natural systems, economy, and resident's quality of life.
- Continue building regional partnerships to obtain additional water storage within the Caloosahatchee basin to address high and low-flow impacts affecting Sanibel's water quality.
- Meeting new federal and state-mandated water quality regulations within the Sanibel River and our coastal waters, including Total Maximum Daily Loads and Numeric Nutrient Criteria.
- The repeated attempts of the Florida legislature to limit the City's ability to implement measures to protect local water quality, including fertilizer ordinances, require substantial staff time and threaten to limit the tools available to address State water quality mandates.
- Continued implementation of the island-wide Brazilian Pepper Eradication Program is critical for maintaining productive wildlife habitat on conservation lands. New and increasing threats from exotic vines, including air potato and rosary pea, must also be addressed with continued control programs and grant funding.
- Management and treatment of newly introduced invasive exotic species (e.g., vines, insects, reptiles).
- Management of native wildlife expanding range on Sanibel (e.g., coyotes).
- Beachfront lighting compliance is at its highest level in the past 20 years and yet lighting violations still occur each year causing sea turtle hatchling disorientations and deaths. A continuing focus on this issue is essential as we work with our partners to protect both sea turtles and nesting shorebirds on Sanibel's thirteen miles of beaches.
- The erosional impact of the rock groin on Captiva at Blind Pass continues unabated and results in the need for cooperative action between the City, Lee County and the Captiva Erosion Prevention District to protect Sanibel's beaches.
- Habitat management to prevent the gradual succession from open grassy habitats to hardwood forests that is steadily reducing gopher tortoise habitat throughout the island. Mowing, hardwood control, and prescribed fire must be used to maintain coastal scrub habitat critical for tortoises and other rare species.
- Management of grassland savannah habitat in the interior freshwater wetlands through prescribed fire to protect critical habitat for the endangered Sanibel rice rat, wading birds and other wildlife.

DEPARTMENT OBJECTIVES

To Support Council Goals:

- To assess environmental issues associated with commercial redevelopment and the Civic Core Master Plan and provide recommendations and alternatives to protect the island's natural resources and meet the goals of the Sanibel Plan.
- To continue to work with island golf courses to implement the City's Fertilizer and Lake Management Guidelines, evaluate progress annually, and work to improve scores on annual report cards.
- To continue fertilizer education campaign on fertilizer Best Management Practices, implement Citizen's Fertilizer Education and Outreach Program, and develop stormwater information package for island homeowners to address water quality in community lakes.
- To work closely with City Council and our legislative delegation to prevent preemption of local government's ability to implement measures to protect water quality.
- To complete phase III of the Comprehensive Nutrient Management Plan for Sanibel, which includes a list of priority projects and management measures to effectively reduce stormwater runoff and nutrient pollution to the Sanibel River and coastal waters.
- To work closely with the South Florida Water Management District and the U.S. Army Corps of Engineers, as well as other local, state, and federal leaders, to implement water storage and treatment projects within the Caloosahatchee basin to improve water quality and reduce ecological impacts associated with high and low-flow issues.

DEPARTMENT OBJECTIVES (CONTINUED)

To Support Departmental Objectives:

- To improve stormwater treatment from developed lands and roadways prior to discharge into Sanibel River through completion of the Comprehensive Nutrient Management Plan, implementation of priority projects and increased retention time in stormwater swales prior to discharge.
- To continue to implement the island-wide Brazilian Pepper Eradication Program.
- To maintain all city-managed lands, including parks and conservation lands, free of invasive exotic plants and to manage these lands in a manner that maximizes the value of wildlife habitat.
- To minimize sea turtle hatchling disorientations by dedicating sufficient resources to achieve beach lighting compliance through enforcement of Sanibel's outdoor lighting standards.
- To build regional consensus on a short- and long-term restoration strategies to reduce the harmful impacts of the freshwater releases from Lake Okeechobee and the Caloosahatchee watershed

PERFORMANCE INDICATORS

Description	Estimated FY 2015	Actual FY 2014	Actual FY 2013	Actual FY 2012	Actual FY 2011
To achieve "compliance" on Golf Course Fertilizer and Lake Management Guidelines at all island golf courses annually	100%	66%	66%	66%	33%
To apply for grants annually to fund necessary environmental restoration projects	Yes	Yes	Yes	Yes	Yes
To complete initial Code Enforcement for Zone 6 of the Brazilian pepper program in 2013	NA	100%	100%	N/A	N/A
To treat all City managed properties for invasive exotic plants annually	100%	100%	100%	100%	100%
To prevent all sea turtle hatchling disorientations via lighting compliance efforts annually	100%	99%	100%	99%	99%
To engineer, permit and fund the Sanibel Bayous utility site restoration project (timeline extended to 2014)	NA	100%	80%	60%	30%
To mow or burn all high quality coastal scrub habitat on City managed lands every 3 years	90%	90%	90%	90%	90%
To draft a Comprehensive Nutrient Reduction Plan for Sanibel (Phases 1&2 completed FY13-14; Phase III FY14-15)	100%	85%	80%	40%	20%
To engineer, permit and begin construction on the Pond Apple Park/ShIPLEY Trail Connector Trail boardwalk	NA	100%	100%	50%	N/A
Develop Annual Report on State of the Environment for Sanibel (general beach habitat use assessment)	90%	90%	90%	50%	N/A
To respond to requests for property inspections within 5 work days	95%	90%	95%	80%	80%

RESPONSIBILITIES

Environmental Restoration

- Wetland restoration
- Initial exotic removal
- Hydrologic restoration
- Coastal scrub enhancement
- Dune establishment
- Tree and shrub planting

Habitat Management

- Exotic plant control
- Prescribed fire
- Coastal scrub maintenance
- Dune and shoreline protection

Water Quality

- Agency coordination
- Project advocacy
- Management advocacy
- Stormwater management
- BMP implementation
- Water quality monitoring

Protected Species Management

- Sea turtles
- Nesting shorebirds
- Bald eagles
- Wading bird rookeries
- Gopher tortoises
- Rare species plantings

Regulatory Review

- Permit applications
- Pre-application meetings
- Site inspections
- Dune protection
- Wetland and mangrove protection
- Native plant protection
- Listed species protection

Environmental Code Enforcement

- Brazilian pepper
- Other invasive exotics
- Mangrove trimming/removal
- Wetland filling
- Native tree trimming/removal
- Water pollution
- Dune trimming (CCCL)

Public Education

- Fertilizer and lake management
- Water quality
- Vegetation codes
- Vegetation trimming and maintenance
- Contractor competency classes
- Exotic species management
- Sea turtle and shorebird protection
- Habitat restoration and maintenance
- Firewise Program/prescribed fire
- Dark Skies Ordinance/Outdoor Lighting Standards
- Alligator Safety

TREND ANALYSIS

Description	Actual FY 2014 YTD	Actual FY 2013	Actual FY 2012	Actual FY 2011
Acres Managed	660	660	660	660
Acres of Exotics Treated (all lands)	1,363 ^{af}	1,063 ^a	922 ^a	660
Gallons of Herbicide Used	260 ^{af}	168 ^a	160 ^a	140
Site Inspections	442 (thru April)	1,066 ^b	N/A	N/A
Inquiries Handled ^d	950 (thru April)	1,756 ^c	N/A	N/A
Public Education Staff Presentations	13 (thru May) ^e	14	13	N/A
Sea Turtle Lighting Violations	57 (1 survey)	72 (5 surveys)	75 (5 surveys)	82 (5 surveys)
Vegetation Contractors Trained	44 (thru May14)	37	56	65
Fertilizer Contractors Trained	46(thru May14)	49	37	43
Vegetation Permits Issued by DNR staff	78 (thru 14- 7970)	66	114	118

^a Includes treatment of exotics on J.N. Ding Darling NWR– Grant funded through State Bureau of Invasive Plant Management and the US Fish and Wildlife Service

^b Began tracking October 2012 (data included October 2012 through May 2013).

^c FY 2013 data included January 2013 through September 2013.

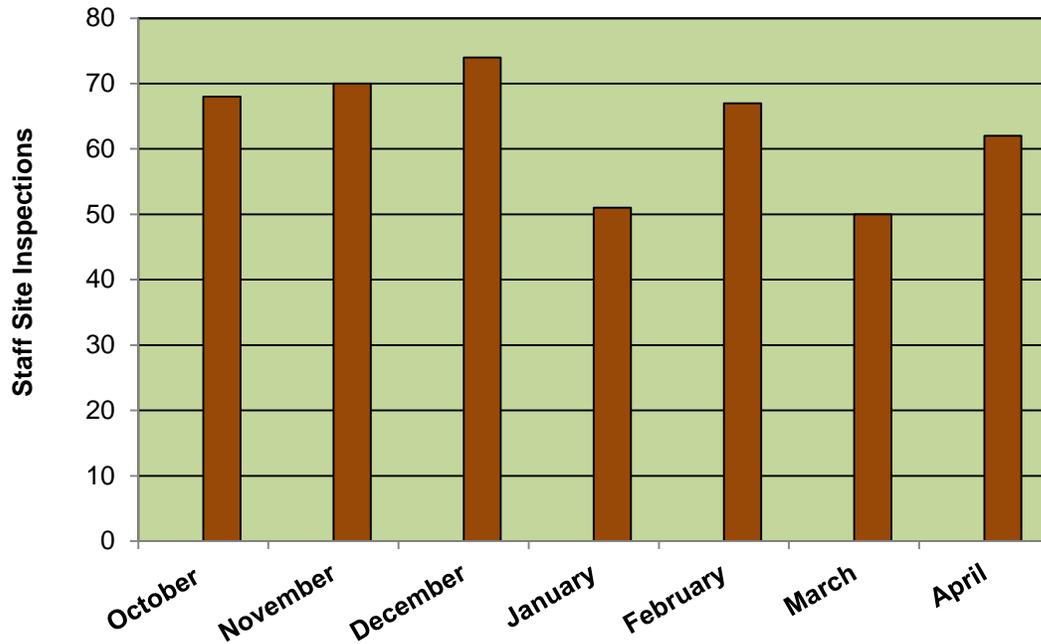
^d Total does not include walk-ins, emails, or direct calls received after business hours.

^e Water Quality--League of Women Voters, Shell Museum Lecture Series, Everglades Coalition, Chamber of Commerce WQ Forum; Fertilizer--City contractor classes (4); Dark Skies--CASI, Homeowner's Associations (4)

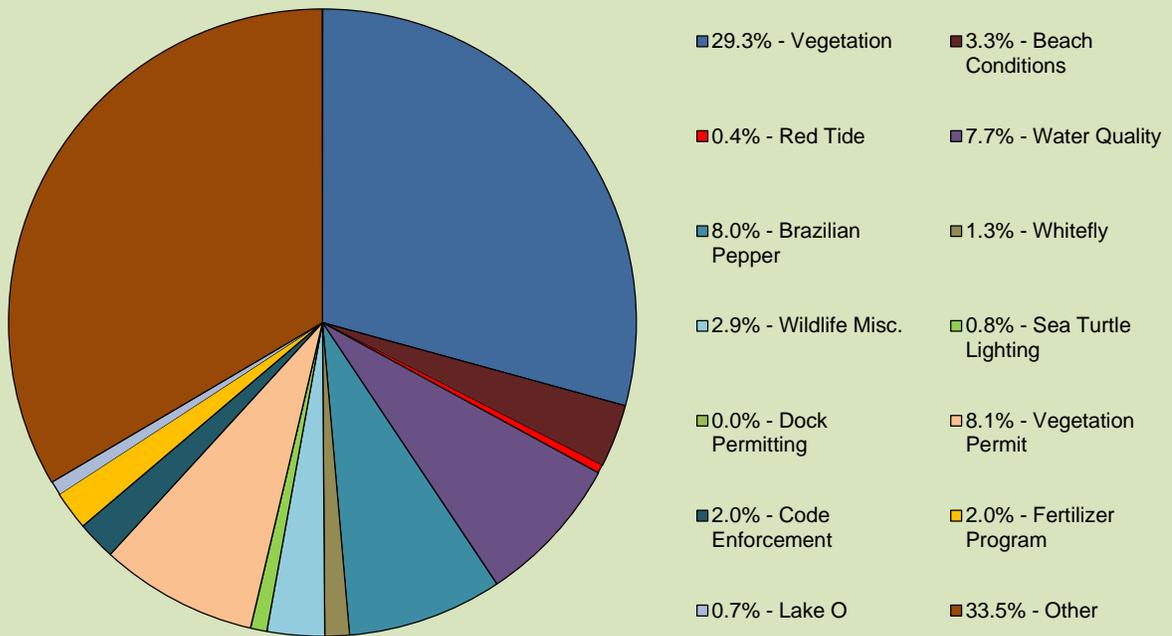
^f Includes treatment of exotics on State Botanical Site – 100% Grant funded by the USFWS

TREND ANALYSIS (CONTINUED)

**Natural Resources Department Site Inspections
FY 2014**



Calls Received October 2013 - April 2014



950 total calls received in time period - average of 136 calls per month